

1 UNITED STATES DISTRICT COURT
2 WESTERN DISTRICT OF TEXAS
3 WACO DIVISION

3 IMPULSE DOWNHOLE) Docket No. WA 19-CA-378 ADA
4 SOLUTIONS, LTD.)
5 vs.) Waco, Texas
6 RUBICON OILFIELD)
7 INTERNATIONAL HOLDING, LLC) March 6, 2020

8 TRANSCRIPT OF MARKMAN HEARING
9 BEFORE THE HONORABLE ALAN D. ALBRIGHT

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09:22:06 1 THE CLERK: Court calls Waco case: 19-CV-378,
09:22:11 2 Impulse Downhole Solutions, Limited vs. Rubicon Oilfield
09:22:15 3 International Holdings, LLC, for a Markman hearing.

09:22:17 4 THE COURT: Counsel, if you would stand up and
09:22:19 5 announce for the record. Mr. Guaragna.

09:22:21 6 MR. GUARAGNA: Good morning, your Honor.

09:22:23 7 John Guaragna for the Plaintiff Impulse. With me
09:22:26 8 today is my partner, Aaron Fountain. The two of us will
09:22:29 9 be splitting up the terms, the argument today. Also, our
09:22:32 10 associate, Zac Loney, is here.

09:22:33 11 THE COURT: Most importantly.

09:22:35 12 MR. GUARAGNA: Leader of our time, Ms. Lineberry
09:22:37 13 is also here with us today.

09:22:38 14 THE COURT: The finest paralegal ever.

09:22:42 15 MR. GUARAGNA: We agree, your Honor.

09:22:43 16 THE COURT: And Mr. Nash, who's sporting a lovely
09:22:46 17 beard.

09:22:50 18 MR. NASH: Thank you, your Honor. I've been
09:22:50 19 working on it quite a bit.

09:22:52 20 Brian Nash of Pillsbury here on behalf of
09:22:55 21 Rubicon. I'm joined by my colleague, Steven Tepera, as
09:22:59 22 well as Sarah Goetz is in the audience. And our client is
09:23:01 23 also here with us today, Sue Kean of Rubicon.

09:23:04 24 THE COURT: Very good. Thank y'all for being
09:23:06 25 here. You may be seated.

09:23:12 1 MR. GUARAGNA: Your Honor, excuse me, before we
09:23:13 2 proceed, we have a couple of copies of our presentation,
09:23:15 3 if I could hand those up.

09:23:16 4 THE COURT: Perfect.

09:23:25 5 MR. GUARAGNA: We included an extra copy of the
09:23:27 6 patent, your Honor.

09:23:27 7 THE COURT: Okay. Perfect.

09:23:29 8 MR. NASH: I'll approach, if that's okay, your
09:23:32 9 Honor, too, so you'll have them.

09:23:33 10 THE COURT: Sure. And you all should notice that
09:23:42 11 my favorite clerk is sitting in front of me. He's -- we
09:23:48 12 are trying someone new out on these patent cases, so we'll
09:23:51 13 see how Austin does.

09:23:58 14 Okay. I think I'm in the right order. If I'm
09:24:04 15 not, let me know. I think the first claim term to take up
09:24:07 16 is a cyclic, which is C-Y-C-L-I-C for the court reporter,
09:24:15 17 polyrhythmic, which is P-O-L-Y, and then, rhythmic,
09:24:22 18 R-H-Y-T-H-M-I-C, pattern. Is that what you all have as
09:24:25 19 the first claim term as well?

09:24:27 20 MR. GUARAGNA: It is, your Honor.

09:24:28 21 MR. NASH: Yes, your Honor.

09:24:29 22 THE COURT: And let the record reflect that I
09:24:32 23 came out before the hearing started and let the parties
09:24:36 24 know that the opening thought of the Court for a
09:24:41 25 construction for this claim term, which I would like --

09:24:45 1 I'm going to hear from the parties on, would be two or
09:24:50 2 more different rhythms within one revolution of the
09:24:55 3 flowhead wherein a rhythm refers to either varying
09:25:01 4 amplitude or duration between pressure peaks.

09:25:04 5 Mr. Fountain.

09:25:07 6 MR. FOUNTAIN: Thank you, your Honor.

09:25:25 7 THE COURT: Yes, sir.

09:25:26 8 MR. FOUNTAIN: May it please the Court. Aaron
09:25:28 9 Fountain on behalf of Plaintiff Impulse Technologies.

09:25:35 10 By way of brief introduction, your Honor, the 584
09:25:41 11 patent is generally directed to a downhole tool that
09:25:44 12 produces a vibration pattern that can improve a drilling
09:25:48 13 operation. The basic components of that tool are a motor,
09:25:51 14 a flowhead, and a flow restrictor. The flowhead rotates,
09:25:56 15 and the flow restrictor as well as the flowhead each have
09:25:59 16 a plurality of ports as that flowhead rotates. The ports
09:26:04 17 move into in and out of alignment, and that alignment and
09:26:07 18 misalignment is what causes the cyclic polyrhythmic
09:26:12 19 pattern that your Honor wants to hear about.

09:26:15 20 Now, the specification discusses the cyclic
09:26:20 21 polyrhythmic pattern discussed in the 584 patent by
09:26:24 22 reference to prior art fluid pressure patterns. They are
09:26:29 23 criticized in the technical background section of the
09:26:32 24 specification as adversely affecting measurement while
09:26:35 25 drilling or survey equipment mounted in the drilling

stream. Now, I think a full discussion of measurement while drilling apparatus is beyond the scope of this claim term, but very briefly, it's a method by which fluid pressure pulses are used by equipment down in the drilling hole to send information back up through the drill stream to the surface.

And what the specification says is that the polyrhythmic pressure peak pattern resulting from the embodiments and suitable variations discussed in the 584 patent can reduce that interference or damage caused to other MWD or survey equipment.

Now, there's no suggestion in this patent that the benefits of the polyrhythmic pattern can only be realized with respect to a single rotation of the flowhead. And, in fact, the benefits from the lack of interference between the claimed cyclic polyrhythmic pattern and the pressure pulses used by MWD and survey equipment is equally realizable over multiple rotations of the flowhead.

THE COURT: I think we agree with you on that.

MR. FOUNTAIN: Thank you, your Honor.

Now, we've considered your Honor's suggested construction at this point, and what I'd like to do is walk through why we believe that the inclusion of one rotation of the flowhead and your Honor's suggested

09:28:15 1 construction is not appropriate in review of the intrinsic
09:28:20 2 record of the 584 patent. And then, I would like to end
09:28:23 3 by briefly discussing your Honor's construction after I've
09:28:28 4 proceeded, if that's all right.

09:28:30 5 THE COURT: Well, let me ask you this. If it's
09:28:32 6 not within one revolution, then where is the polyrhythmic
09:28:38 7 pattern?

09:28:39 8 MR. FOUNTAIN: So I think the best way to
09:28:42 9 consider that, your Honor, would be --

09:28:43 10 THE COURT: And I'll tell you -- I'm sorry to
09:28:45 11 interrupt you, but I'll tell you, that's -- I think,
09:28:47 12 unless my clerks tell me I'm wrong. You know, we spent a
09:28:51 13 lot of time trying to get this one claim term correct.
09:28:55 14 And I think that was -- my question to you is one of the
09:28:58 15 things that we particularly struggled with and we think
09:29:01 16 has to be reflected in the construction.

09:29:05 17 MR. FOUNTAIN: Understood, your Honor.

09:29:09 18 And I think that where we start would be with the
09:29:14 19 understanding of a person of ordinary skill in the art
09:29:16 20 that encounters these terms, "cyclic polyrhythmic
09:29:20 21 pattern." Right? The basic components of that claim
09:29:22 22 term, "cyclic" and "poly," have a well-understood meaning
09:29:27 23 to a person of ordinary skill in the art, a jury.
09:29:31 24 "Cyclic" simply refers to repeating. And "poly" refers to
09:29:36 25 more than one. Rubicon has never disputed that those are

09:29:40 1 accurate descriptions of the plain meaning of those parts.

09:29:45 2 And this court and the Federal Circuit has held
09:29:47 3 that when the component parts of a claim term are well
09:29:51 4 understood, that a POSITA can infer the meaning of the
09:29:56 5 entire claim term from those parts. And I think we look
09:29:58 6 at the Bancorp case, it's pretty helpful for how the
09:30:03 7 analysis should proceed here, and that is the term in
09:30:06 8 Bancorp was surrender value, protected investment,
09:30:11 9 credits.

09:30:12 10 And when the Court looked to construe that term,
09:30:14 11 they looked at the first part, surrender value, and said,
09:30:17 12 look, a person of ordinary skill in the art understands
09:30:19 13 what that part means. And then, for the protected
09:30:23 14 investment and the credits part, the Court looked to the
09:30:26 15 specification and saw how those terms were used, and put
09:30:29 16 all that together and concluded that the plain and
09:30:33 17 ordinary meaning of that term would be readily understood
09:30:36 18 by a person of ordinary skill in the art. We think that's
09:30:38 19 exactly the approach that should be followed here; and
09:30:41 20 then, when that approach is followed, the inclusion of one
09:30:45 21 rotation of the flowhead within the construction of cyclic
09:30:49 22 polyrhythmic pattern cannot be correct.

09:30:51 23 So very briefly, your Honor, I'd like to look at
09:31:00 24 the specification's use of polyrhythmic. Polyrhythmic is
09:31:05 25 used in a way that is similar to, if not interchangeable

09:31:09 1 with, complex rhythmic. It appears two times in the
09:31:14 2 specification. And a complex rhythmic pattern is
09:31:18 3 distinguished from a simple rhythmic pattern. And in the
09:31:22 4 same way, a polyrhythmic pattern is distinguished from a
09:31:25 5 single rhythmic pattern.

09:31:34 6 And here is the answer to your Honor's specific
09:31:37 7 question. If the pattern is not observed in a single
09:31:40 8 rotation of the flowhead, where does that pattern exist?
09:31:46 9 Impulse's expert, Dr. Sharma, looked to the teachings of
09:31:50 10 the specification and concluded that a person of ordinary
09:31:53 11 skill in the art would understand from the specification
09:31:57 12 that a cyclic polyrhythmic pattern can exist across
09:32:01 13 multiple rotations of the flowhead.

09:32:04 14 And the way that that works is, the specification
09:32:07 15 teaches that the motion of the rotor -- and it's a little
09:32:13 16 bit hard to see, but the way these motors are set up is
09:32:17 17 that there's a centerpiece that's shown as kind of an
09:32:20 18 elongated oval there called a rotor, and then, it rotates
09:32:24 19 within a stator, which is the outer part that has the
09:32:27 20 somewhat triangular cutout in the middle.

09:32:29 21 And the specification says that a person of
09:32:32 22 ordinary skill in the art understands that that geometry
09:32:35 23 when that rotor rotates, it also moves eccentrically.
09:32:41 24 That is, as it spins, it walks around in a geometric shape
09:32:46 25 within the confines of the stator. And the shape that it

09:32:49 1 takes when it does that is the dependent on the ratio of
09:32:53 2 the lobes of the rotor to the number of lobes of the
09:32:58 3 stator.

09:32:58 4 And so, if you have two lobes on a rotor and
09:33:01 5 three lobes on a stator, as shown in figure 7, that
09:33:04 6 walking about of the rotor as it rotates is going to be
09:33:08 7 roughly triangular in shape. Similarly if you had a
09:33:15 8 three-four ratio where the rotor had three lobes and a
09:33:19 9 stator had four lobes, then that walking-about motion of
09:33:23 10 the end of the rotor is going to be roughly square in
09:33:25 11 shape.

09:33:27 12 Now, the specification explains that a person of
09:33:31 13 ordinary skill in the art would have that understanding.
09:33:33 14 The specification also says that the motion of the rotor
09:33:38 15 is transferred to the flowhead. Now, what Dr. Sharma
09:33:43 16 explained is that when you have that configuration where
09:33:45 17 the eccentric motion of the rotor is transferred to the
09:33:49 18 flowhead, that the flowhead will move in that eccentric
09:33:53 19 shape of the rotor, and as it spins, what you get is
09:33:58 20 something that came to a spirograph child's toy in that
09:34:03 21 you have a pattern that develops, and the pattern itself
09:34:05 22 rotates as you move from cycle to cycle.

09:34:09 23 And so, what that creates, if you're thinking
09:34:11 24 about the ports of the flowhead and the ports of the flow
09:34:14 25 restrictor is that as the flowhead rotates, it's going to

09:34:19 1 move around relative to the stationary flow restrictor
09:34:23 2 such that the alignment of the ports in a second rotation
09:34:26 3 will not be the same as the alignments of the ports in the
09:34:30 4 first rotation.

09:34:31 5 And if you look at figure 8, what you see is that
09:34:34 6 a pattern begins to develop as this rotates over and over
09:34:37 7 and over again. And so, the cyclic notion of the
09:34:41 8 polyrhythmic pattern, according to this specific teaching
09:34:45 9 of the specification, is going to be that the pattern will
09:34:49 10 emerge over successive rotations of the flowhead.

09:34:52 11 Importantly, Rubicon's expert does not dispute
09:35:00 12 that that's how this works. Right? What Rubicon's expert
09:35:05 13 said is, look in this embodiment, if you proceed down in
09:35:09 14 the specification, there are additional features, a
09:35:12 15 universal adapter, a radial bearing, that limit the motion
09:35:17 16 of the flowhead so that it cannot walk around with the
09:35:21 17 rotor as it spins.

09:35:23 18 Importantly, that's clearly an example
09:35:26 19 embodiment. The specification just says in this example,
09:35:29 20 and it goes on to recite the universal adapter and the
09:35:33 21 radial bearing. And those are components that are
09:35:37 22 separately claimed independent claims. I believe it's
09:35:41 23 dependent claim 10 recites the radial bearing, and
09:35:48 24 dependent claims 14 and 35 create the universal adapter.
09:35:53 25 So according to the basic teaching of the specification,

09:35:55 1 when the eccentric motion is imparted to the flowhead, the
09:35:59 2 flowhead will walk around and create a repeating pattern
09:36:03 3 of varying pressure pulses across successive cycles of the
09:36:08 4 flowhead's rotation.

09:36:10 5 So that's my answer to where is the pattern
09:36:17 6 observed if it's not within one rotation of the flowhead.
09:36:22 7 Now, Rubicon's supposed textual hook for why we have to
09:36:29 8 look at one rotation of the flowhead to find the cyclic
09:36:33 9 polyrhythmic pattern is that the specification includes a
09:36:35 10 definition of a different word, "cycle." Now, these words
09:36:40 11 are similar. They share a prefix, but they don't mean the
09:36:43 12 same thing in ordinary parlance, and there's nothing in
09:36:47 13 the 548 pattern to suggest otherwise.

09:36:49 14 The specification never provides a definition of
09:36:54 15 cyclic. And the definition of cycle that Rubicon relies
09:36:57 16 on appears in a different context. The phrase "cyclic
09:37:00 17 polyrhythmic pattern" does not appear in the specification
09:37:03 18 passage that Rubicon points to for its definition of the
09:37:07 19 different word "cycle."

09:37:11 20 And if we look at the claims, we see that the
09:37:15 21 claims fully support this understanding that the word
09:37:19 22 "cycle" is not the same as the word "cyclic." Independent
09:37:24 23 claim 26, which is not asserted in this case, cites at the
09:37:28 24 first full limitation, the drilling fluid varies in a
09:37:32 25 cyclic polyrhythmic pattern. Dependent claim 27 further

limits the pattern to say that it includes at least one interval in its cycle where the flow of the drilling fluid is substantially stopped. That that language there, "at least one interval in its cycle," is where Rubicon takes its supposed definition, but claim 27 includes the word "cyclic" and to the word "cycle" by virtue of its dependence on claim 26. Different claim terms mean different things that's consistent with the plain meaning of those words and as shown here in the relationship between claims 26 and 27.

THE COURT: Let me ask you this. Because your presentation is very good and you're helping me understand this a little better than I had understood it before. With respect to the proposed construction that we gave you, are you -- and this isn't, you know -- I want you to protect your record, and if you disagree with all of it, you tell me you disagree with all of it.

But my sense is what you are telling me is that the part of it that you disagree with primarily is the words "within one revolution."

MR. FOUNTAIN: That's correct, your Honor.

THE COURT: And so, if we were to the change the words "within one revolution" in the proposal that I gave you to the words "across cycles" and it were to read, two or more different rhythms across cycles of the flowhead

09:39:17 1 wherein a rhythm -- you know the rest of it -- would that
09:39:22 2 satisfy you all? Would that satisfy the plaintiff?

09:39:32 3 I'm trying to summarize in a workable way what
09:39:34 4 you -- I think I -- first tell me if what I'm trying to
09:39:38 5 get to takes into consideration what you are saying we had
09:39:45 6 -- in a gracious way, you said we had gotten wrong. And
09:39:48 7 so, that's what I'm -- and then I'm, of course, going to
09:39:51 8 give Mr. Nash an opportunity to work on -- or, you know,
09:39:58 9 I've been handed a note, another possibility would be as
09:40:02 10 opposed to "within one revolution" to say "within one
09:40:07 11 cycle."

09:40:10 12 Is that something you could live with?

09:40:12 13 MR. FOUNTAIN: Let me take the second one first,
09:40:14 14 your Honor.

09:40:14 15 THE COURT: Okay.

09:40:15 16 MR. FOUNTAIN: The answer to your question
09:40:17 17 regarding the second proposal is definitely no.

09:40:20 18 THE COURT: Okay.

09:40:21 19 MR. FOUNTAIN: Because the specification, I
09:40:22 20 agree, does define cycle as one revolution of the
09:40:24 21 flowhead. So that would be swapping out sort of larger
09:40:26 22 words for a single word that's defined to mean the larger
09:40:30 23 thing that I find objection to.

09:40:32 24 THE COURT: Okay. So you would not want --
09:40:34 25 doesn't mean you won't get it. But I'm just trying to get

09:40:38 1 this right.

09:40:39 2 MR. FOUNTAIN: Understood, your Honor.

09:40:40 3 THE COURT: And so, you vote no on "within one
09:40:44 4 cycle." What about two or more different rhythms across
09:40:48 5 cycles of the flowhead?

09:40:49 6 MR. FOUNTAIN: So I think that scope needs to be
09:40:52 7 included in the term "cyclic polyrhythmic pattern" for the
09:40:55 8 reasons that I've been trying to articulate as we've gone.
09:40:59 9 The problem I have with that construction is that it would
09:41:03 10 not be satisfied by some of the preferred embodiments in
09:41:08 11 the specification, which I agree do show multiple peaks at
09:41:11 12 different amplitudes or durations within a single cycle.

09:41:15 13 THE COURT: That's the problem we're having. You
09:41:16 14 put your finger on exactly the problem we had in coming up
09:41:19 15 with the correct construction for -- that we've been
09:41:22 16 wrestling with was, what -- I compared it earlier to, I
09:41:27 17 think we all know what it looks like to see someone using
09:41:30 18 a Hula Hoop. But if one were to try and claim how one did
09:41:35 19 it, what words would you use so everyone understood what
09:41:39 20 that meant?

09:41:40 21 And so, you just put your finger on why we've
09:41:45 22 been wrestling so hard to come up with the right language
09:41:47 23 because we understand that issue, and we want to make sure
09:41:51 24 that that's accurate. But we found, for example, you
09:41:54 25 know, your proposal -- your proposed word "repeating" is

09:41:59 1 not necessarily constrained to a -- you know, something
09:42:03 2 happens more than once might be repeating, but might not
09:42:05 3 be what the patent does in the same way that, you know, we
09:42:11 4 were coming up with a number of words, iterative. We
09:42:16 5 struggled -- we spent a lot of hours on this trying to get
09:42:21 6 it right.

09:42:23 7 And so, take -- if my proposal and if you say you
09:42:33 8 just can't work with it at all, let me know. But is there
09:42:37 9 something you would do -- you would amend? Is there a way
09:42:41 10 you would amend mine so I could -- let me -- why don't you
09:42:44 11 do that, tell me what you would do to amend mine. And
09:42:46 12 I'll hear from Mr. Nash and he can -- we can keep trying
09:42:50 13 to work this out.

09:42:51 14 MR. FOUNTAIN: Thank you, your Honor.

09:42:53 15 I think one proposal, it's a little awkward and
09:42:56 16 it doesn't normally fit with how we like to do claim
09:43:00 17 construction or how courts seem to prefer to do claim
09:43:03 18 construction, but, you know, you could say, two or more
09:43:05 19 different rhythms within one or more revolutions of the
09:43:08 20 flowhead. That captures the single revolution and the
09:43:10 21 multiple revolution example explained by Mr. Sharma.

09:43:13 22 What Mr. Guaragna and I discussed, before your
09:43:18 23 Honor came out and took the bench, would be crossing out
09:43:24 24 the "within one revolution of the flowhead" and using what
09:43:28 25 we believe to be the better meaning of cyclic as it

09:43:32 1 appears in the 584 patent specification to be a
09:43:38 2 construction along the lines of a repeating pattern of two
09:43:41 3 or more different rhythms wherein a rhythm refers to
09:43:47 4 either varying amplitude or duration between pressure
09:43:51 5 peaks.

09:43:51 6 And the reason why I think that is a good
09:43:53 7 proposal is that that pattern can repeat across multiple
09:43:57 8 rotations of the flowhead. It can repeat within a single
09:44:01 9 rotation of the flowhead. But the basic explanation of
09:44:04 10 what's going on here, I think, is fairly captured by what
09:44:07 11 we've proposed as an adjustment to your Honor's tentative
09:44:11 12 construction you gave us at the beginning.

09:44:15 13 THE COURT: Well, and I'm not saying it's the
09:44:19 14 construction I would adopt, but the proposal that you have
09:44:23 15 made, certainly the first part of it -- and I was one of
09:44:30 16 the ones arguing on this side when we were discussing it
09:44:33 17 is, it's -- what you are proposing certainly reflects
09:44:39 18 pretty much what the language says of a cyclic
09:44:44 19 polyrhythmic pattern where -- and what we're trying to
09:44:46 20 define there of what rhythm means.

09:44:50 21 Again, the issue being whether -- we had a great
09:44:56 22 debate whether the word "repeating" was the right -- was
09:45:00 23 the correct word or not.

09:45:02 24 MR. FOUNTAIN: I think it flows straight from the
09:45:14 25 -- so I think it flows straight from the plain and

09:45:18 1 ordinary meaning of the word "cyclic," your Honor. It's
09:45:20 2 plain and ordinary meaning that's never been disputed and
09:45:22 3 we think that it is -- is consistent. If you think about
09:45:25 4 how this tool operates, right, that flowhead, it spins,
09:45:30 5 and Rubicon's expert does explain it in a different
09:45:33 6 context that this thing spins at a rate of something like
09:45:36 7 ten revolutions per second. And you're drilling thousands
09:45:40 8 of feet of downhole space and that this thing just
09:45:45 9 continues to rotate.

09:45:47 10 And whether the pattern repeats over a very
09:45:51 11 narrow or very short span as it rotates within a single
09:45:57 12 rotation of the flowhead, if it has a lot of ports such
09:46:00 13 that you get the pattern beats repeatedly within a single
09:46:04 14 rotation, that's fine. If the pattern has fewer ports and
09:46:08 15 relies on this eccentric motion transferred from the rotor
09:46:15 16 in order to start to get that repetition over multiple
09:46:18 17 cycles of the flowhead, that's fine.

09:46:20 18 But there's no language in this patent that says
09:46:23 19 you have to have one or you have to have the other. And,
09:46:30 20 in fact, if your Honor will indulge me one more slide
09:46:33 21 before you invite Mr. Nash up, I think the patent
09:46:36 22 explicitly teaches that you have to have this term broad
09:46:40 23 enough to cover both the examples.

09:46:41 24 THE COURT: I'm writing what you're saying down.
09:46:42 25 Give me one second to do that. I'm writing down what you

09:46:46 1 propose.

09:46:58 2 And now that I've looked at your counterproposal
09:47:01 3 as it were, why does the Court need to swap out the word
09:47:10 4 "repeating" for "cyclic" at all?

09:47:14 5 MR. FOUNTAIN: If I understand your question,
09:47:16 6 your Honor, are you asking whether we might also be okay
09:47:19 7 with a cyclic pattern of two or more different rhythms --

09:47:23 8 THE COURT: Yes.

09:47:24 9 MR. FOUNTAIN: -- followed by -- I think that
09:47:25 10 would be fine, your Honor. As I've said, I think
09:47:28 11 repeating and cyclic are the same thing.

09:47:29 12 THE COURT: Yes. That was my question. So did
09:47:35 13 you have anything else you wanted to say?

09:47:37 14 MR. FOUNTAIN: If I might show your Honor more
09:47:38 15 slide before Mr. Nash comes up.

09:47:39 16 THE COURT: You can do whatever you'd like.

09:47:42 17 MR. FOUNTAIN: I certainly have more I can say,
09:47:43 18 but I think we're on a productive line of interaction
09:47:45 19 here.

09:47:46 20 THE COURT: Why don't we limit it -- I'll modify
09:47:49 21 that in the future. Do you have anything -- I'll say that
09:47:51 22 every time from now on: Do you have anything else
09:47:53 23 productive that you might want to say?

09:47:55 24 MR. FOUNTAIN: I believe I do, your Honor.

09:48:00 25 THE COURT: Tell me which slide you're on,

09:48:02 1 please.

09:48:05 2 MR. FOUNTAIN: The big screen says one, but I
09:48:07 3 know that's not right. Slide 12, your Honor.

09:48:11 4 THE COURT: Okay. Thank you.

09:48:13 5 MR. FOUNTAIN: So this is where I think that the
09:48:17 6 sort of breadth of the term "cyclic polyrhythmic pattern"
09:48:22 7 really becomes very, very clear. And, you know, I think
09:48:27 8 that there's a little bit of a fuzzy area around what's
09:48:32 9 the plain and ordinary meaning of a claim term. But
09:48:36 10 there's one articulation in Phillips that I think is
09:48:39 11 particularly appropriate here, and that is the ordinary
09:48:41 12 meaning of a claim term is its meaning -- is its ordinary
09:48:46 13 meaning to the skilled artisan after reading the entire
09:48:51 14 patent.

09:48:51 15 Right. So I realize that the question we're here
09:48:53 16 to address is what does cyclic polyrhythmic pattern mean.
09:48:57 17 But once the person of ordinary skill in the art reads
09:48:59 18 this patent, they'd have to conclude that it's broad
09:49:01 19 enough to include both a pattern that exists within one
09:49:05 20 rotation and a pattern that exists across multiple
09:49:08 21 rotations. And the reason for that is very
09:49:10 22 straightforward.

09:49:11 23 On the left of the slide, we see -- this slide
09:49:16 24 has two separate descriptions of the cyclic polyrhythmic
09:49:21 25 pattern. They're both introduced in exactly the same way.

09:49:24 1 There's a paragraph that describes an embodiment or aspect
09:49:27 2 of the invention and concludes by reciting a cyclic
09:49:31 3 polyrhythmic pattern. And the very next paragraph in both
09:49:35 4 excerpts begins, in one aspect, the pattern comprises, and
09:49:41 5 then, it includes two different descriptions.

09:49:44 6 So because the specification uses the term
09:49:47 7 "cyclic polyrhythmic pattern" in a very general way to
09:49:51 8 introduce two different descriptions, whatever it means, a
09:49:55 9 person of ordinary skill in the art would conclude that
09:49:57 10 the term has to be broad enough to encompass both
09:50:00 11 descriptions.

09:50:03 12 And what we have underlined on the right is the
09:50:06 13 language from which Rubicon plucked its construction and
09:50:09 14 the language from which Rubicon plucked this idea that a
09:50:13 15 cyclic polyrhythmic pattern has to be limited to a single
09:50:16 16 rotation of the flowhead. The first underlined example is
09:50:21 17 referring to peaks of varying amplitude. The second
09:50:24 18 underlined example is referring to peaks of varying
09:50:27 19 duration between them.

09:50:29 20 But, importantly, a similar discussion of peaks
09:50:34 21 of varying amplitude and peaks with varying duration
09:50:38 22 between them appears in the specification passage on the
09:50:40 23 left. That passage makes no mention of within a single
09:50:45 24 revolution of the flowhead. So if the Court were to adopt
09:50:50 25 Rubicon's construction or the initial construction that

09:50:55 1 your Honor suggested we consider, it would exclude the
09:50:58 2 description of the cyclic polyrhythmic pattern on the
09:51:02 3 left-hand side of slide 12. There's no principle basis
09:51:07 4 for doing so.

09:51:07 5 As I've said, the plain and ordinary meaning of
09:51:10 6 cyclic is merely repeating, and that's a meaning that
09:51:13 7 makes this claim term broad enough to encompass both
09:51:16 8 examples which are clearly within the scope of the term as
09:51:21 9 it's used in the specification.

09:51:33 10 May I do one more, your Honor?

09:51:35 11 THE COURT: Whatever you'd like.

09:51:37 12 MR. FOUNTAIN: Thank you.

09:51:38 13 Now, the passage on the left throughout the
09:51:44 14 stages of briefing was largely unaddressed, if not
09:51:48 15 entirely unaddressed, by Rubicon's brief. We pointed it
09:51:53 16 out in our opening brief that, hey, you've got two
09:51:56 17 separate descriptions of cyclic polyrhythmic pattern, they
09:51:59 18 both have to be included, and Rubicon's brief pretty much
09:52:01 19 ignored the one on the left.

09:52:04 20 And by their reply brief, what they said is,
09:52:07 21 well, the one on the left has the word "cycle" in it;
09:52:11 22 therefore, the entire thing is limited to one rotation of
09:52:15 23 the flowhead. But that makes no sense if you look at this
09:52:19 24 language. Right? What we're looking at is, it says, the
09:52:22 25 pattern comprises at least one interval in its cycle. And

09:52:28 1 if that's supposed to modify the varying amplitude and the
09:52:33 2 varying peak duration spacing, it simply doesn't work
09:52:37 3 because both of those have a plurality of fluid pressure
09:52:40 4 peaks. You cannot have a plurality of fluid pressure
09:52:45 5 peaks at one interval of the rotation of the flowhead.
09:52:50 6 You would need at least two intervals of the rotation of
09:52:55 7 the flowhead to have a plurality of peaks.

09:52:58 8 So the inclusion of the word "cycle" in the
09:53:02 9 left-hand passage does not support in any way that that
09:53:05 10 entire passage needs to be understood as limited to one
09:53:12 11 rotation of the flowhead.

09:53:12 12 THE COURT: Got it.

09:53:13 13 MR. FOUNTAIN: Thank you, your Honor.

09:53:18 14 THE COURT: Mr. Nash, at the risk of messing up
09:53:21 15 your presentation, why don't you pick up and respond to
09:53:25 16 the argument that he just made and then, jump back to
09:53:28 17 wherever it was you were going to go with. For purposes
09:53:32 18 of the record, I'm at page 12 of the plaintiff's
09:53:36 19 PowerPoint.

09:53:39 20 MR. NASH: Yes, happily, your Honor. And, in
09:53:40 21 fact, if it's okay, I'll leave this up there for purposes
09:53:43 22 of discussion. I have my own slides, but this one's very
09:53:46 23 pretty and I think it works just fine.

09:53:48 24 THE COURT: Just like you. Very pretty and works
09:53:51 25 just fine.

09:53:53 1 MR. NASH: You're too kind, your Honor. Thank
09:53:54 2 you so much.

09:53:54 3 We do actually address this. I think counsel
09:53:57 4 mentioned that we largely ignored it. It's one of the
09:54:01 5 pieces of evidence that we cited in our opening brief and
09:54:03 6 we relied on that throughout our briefing. And he is
09:54:06 7 correct in how we've described that. It's consistent with
09:54:08 8 our construction. Our construction would not exclude it.

09:54:11 9 I should just back up. I'm saying our
09:54:14 10 construction. We're actually 100 percent in agreement
09:54:17 11 with your Honor's preliminary instruction or construction
09:54:20 12 for this term, and we'd be absolutely fine with that. We
09:54:22 13 think that's very consistent with what we've argued in our
09:54:26 14 briefing.

09:54:26 15 So with respect to this statement, now this comes
09:54:28 16 from column 3, there's the statement that you see there,
09:54:31 17 column 2. There's also a similar statement in column 3,
09:54:34 18 as well. Each of these, we believe, is quasi definitional
09:54:38 19 in the sense that there's a statement about the cyclic
09:54:40 20 polyrhythmic pattern, and then, directly following that,
09:54:42 21 there's a description of what that pattern would comprise.

09:54:45 22 On the one at the right, we do see an express
09:54:49 23 explanation of what constitutes a cycle. So it says,
09:54:52 24 within a single revolution of the flowhead, and plaintiffs
09:54:56 25 have underlined that in red up here on the right. They

09:54:58 1 don't do a similar thing. "They," meaning the patentees
09:55:01 2 in this context over here on the left. Instead, they just
09:55:04 3 use the same word again, which is "cycle." You see that
09:55:07 4 saying, in one aspect, the pattern comprises at least one
09:55:10 5 interval in its cycle.

09:55:12 6 So they simply just happen to repeat the word
09:55:16 7 "cycle" there. It's not as helpful in understanding what
09:55:18 8 constitutes a cyclic polyrhythmic pattern because they
09:55:21 9 just repeated the word.

09:55:22 10 I'd like to respond, I guess, briefly to
09:55:25 11 counsel's statement that you cannot have a plurality in
09:55:28 12 one interval, and we disagree with that statement, your
09:55:32 13 Honor. I think what that's saying is that within a cycle,
09:55:37 14 you may also have an interval. And I guess I don't think
09:55:40 15 we need to start construing the word "interval," but an
09:55:42 16 interval would be a subset of that cycle, in which case,
09:55:46 17 you would have a plurality of pressure peaks with
09:55:48 18 different amplitudes or plurality of pressure peaks with
09:55:50 19 varying time intervals within that interval. So it's just
09:55:53 20 narrowly saying you could also have a subset of a cycle
09:55:57 21 that also has this polyrhythmic behavior.

09:55:59 22 Does that answer your Honor's question?

09:56:01 23 THE COURT: It does. I assume your client,
09:56:05 24 Rubicon, would not be in agreement with the proposal that
09:56:09 25 the plaintiff made?

09:56:10 1 MR. NASH: No, we would not, your Honor. We
09:56:12 2 think there's a very big problem with expanding the
09:56:15 3 meaning of cyclic beyond the context that the patentees
09:56:17 4 intended.

09:56:18 5 THE COURT: And you also would not want the
09:56:20 6 change to be made from within one revolution to across
09:56:25 7 cycles.

09:56:26 8 MR. NASH: That's correct, your Honor. We think
09:56:27 9 that's a similar expansion. It's taking the meaning out
09:56:30 10 of cyclic the patentees intended and turning it into just
09:56:33 11 at some point in time effectively that there is a
09:56:37 12 repetition of multiple patterns.

09:56:40 13 THE COURT: Okay.

09:56:45 14 MR. NASH: If you'll give me a moment, I think my
09:56:48 15 laptop might have fallen asleep on us.

09:56:52 16 THE COURT: Okay.

09:56:59 17 MR. NASH: So, your Honor, there's three aspects
09:57:01 18 of plaintiff's presentation. Actually, well, I had, four,
09:57:04 19 but we just addressed one of them. But I wanted to kind
09:57:06 20 of make sure I focused on what they argued so that I could
09:57:08 21 respond to that.

09:57:12 22 First, I think in their slide 7, they contend
09:57:17 23 that there's a plain and ordinary meaning. And, in fact,
09:57:21 24 I don't want to use their slides, but I do have this in
09:57:23 25 front of me. On slide 7, they've offered up a couple of

09:57:26 1 definitions: One is cyclic and one is for polyrhythmic.
09:57:29 2 Actually checked that, it's for the word "poly," and you
09:57:31 3 can see that on the right-hand side of their slide.

09:57:33 4 I thought it might make sense to start there
09:57:37 5 because they're contending that there's some kind of
09:57:40 6 ordinary meaning, but they didn't ever really do that in
09:57:42 7 their briefing nor did they present any evidence to
09:57:45 8 support that. So these definitions that we see in the
09:57:49 9 slides, these are here for the first time now today.
09:57:51 10 That's not something that they relied on in their
09:57:53 11 briefing.

09:57:53 12 So if you look back at their opening brief, I
09:57:56 13 think it's at page 18 of their opening brief, that's where
09:57:59 14 they discuss their construction. It's one paragraph and
09:58:03 15 there's not a single citation to the evidence, whether
09:58:06 16 intrinsic, extrinsic, or otherwise. So they don't really
09:58:09 17 have evidence or arguments supporting this repeating
09:58:13 18 construction that they've offered. And I think the reason
09:58:16 19 why this is so important here is because this was a unique
09:58:18 20 term that was coined by the inventors. And specifically,
09:58:23 21 they introduced this for the first time in the context of
09:58:24 22 this art and they defined cyclic, and I think that's where
09:58:28 23 the dispute lies.

09:58:28 24 So I'm going to try and go to the parts of the
09:58:31 25 specification that are discussing cyclic, and we can see

09:58:33 1 how the patentees used it here. So to begin, there's a
09:58:37 2 general description of the patent. We've talked about
09:58:39 3 this a little bit in the context of columns 2 and 3. This
09:58:42 4 was where there's a general description of what it means
09:58:44 5 to have a cyclic polyrhythmic pattern. And we see right
09:58:47 6 there in that definitional statement, in addition to the
09:58:49 7 other aspects of your Honor's construction, the word
09:58:53 8 "cyclic" is being interpreted to mean or being defined to
09:58:56 9 mean a single revolution of the flowhead.

09:58:58 10 So we see that in both this statement from column
09:59:00 11 2 as well as the statement from column 3. And then, that
09:59:04 12 same understanding is reinforced and further clarified in
09:59:08 13 the context of the description of the preferred
09:59:10 14 embodiments. So I'd like to look at figure 8 because I
09:59:14 15 think figure 8 in the embodiment reflected there is very
09:59:16 16 instructive.

09:59:16 17 THE COURT: And we've gone over -- I want you to
09:59:19 18 say whatever you want to say but we've -- my clerks and I
09:59:23 19 have gone over figure 8 with me pretty extensively.

09:59:27 20 MR. NASH: Yeah. I won't belabor it any further,
09:59:29 21 your Honor. I do think that figure 8 very important
09:59:31 22 because there's three aspects of it I'd like to point out
09:59:34 23 real quick.

09:59:34 24 THE COURT: Sure.

09:59:35 25 MR. NASH: So in the beginning for column 8, it

09:59:37 1 starts talking about figure 8 and that embodiment and
09:59:39 2 talks about figure A -- figure 8A, and in doing so, the
09:59:43 3 patentees have an express definition of cyclic. And this
09:59:46 4 is pretty blackletter patent law, when you used the word
09:59:50 5 "i.e.," it's a definition: That is. And so, it's saying
09:59:54 6 cycle is one full rotation of the flowhead.

09:59:57 7 And then, that's reinforced later in the
10:00:00 8 description of figure 8B. Now, I'm sure your Honor
10:00:04 9 learned in studying this, figure 8B is reflecting various
10:00:09 10 instances over the course of one full rotation. And it
10:00:11 11 says in describing figure 8B that what is being depicted
10:00:14 12 here is different rotational positions of the flowhead in
10:00:18 13 a single cycle. So in this context, it's very clear what
10:00:21 14 a single cycle is. It's zero to 360 degrees, and it
10:00:25 15 illustrates that repeatedly. So you see that we've got
10:00:29 16 zero, 50, 60, 120, 180, 240, 300. So that's a cycle
10:00:35 17 according to this figure.

10:00:37 18 And then, there's this great callback in column
10:00:40 19 10. And I love column 10 because I think it's the best
10:00:42 20 description of it what is to be like polyrhythmic. And I
10:00:46 21 think to the extent there's a purported invention here,
10:00:48 22 this is where the patentees describe it. They talk about
10:00:50 23 the ports and how they come into and out of alignment that
10:00:54 24 creates polyrhythmic behavior.

10:00:55 25 THE COURT: Which page are you on?

10:00:56 1 MR. NASH: If you go to column 10 and I believe
10:00:59 2 it's lines 33 to 45. Oh, sorry. What slide am I on, your
10:01:03 3 Honor? Slide 10. Okay. So I think this is an important
10:01:13 4 callback right here. In the context of describing
10:01:16 5 polyrhythmic behavior, they take a break in the middle of
10:01:20 6 column 8 or, sorry, column 10, and they say, hey, remember
10:01:23 7 figure 8B where we were discussing it. Yeah, that was a
10:01:26 8 cycle and that's a cycle period, zero to 360 degrees.

10:01:29 9 And you see I've highlighted that here on the
10:01:32 10 slide in blue. It says, it will be appreciated by those
10:01:34 11 skilled in the art that over one revolution of the
10:01:37 12 flowhead, not only will the time interval between adjacent
10:01:40 13 fluid pressure peaks vary, but the magnitudes vary. And
10:01:43 14 that's our definition of polyrhythmic right there. It's
10:01:45 15 what the patentees told us first in columns 2 and 3. And
10:01:48 16 now they've reenforced it in the context of this
10:01:51 17 embodiment that that cyclic aspect of it is one revolution
10:01:55 18 of the flowhead.

10:01:56 19 And I thought I'd show this earlier part here on
10:02:01 20 slide 11 of column 10. I've got a lot of highlighting
10:02:05 21 here, but the bottom part, I think, is important where you
10:02:08 22 see the words "the polyrhythmic, although cyclic," and you
10:02:14 23 see that in a parenthetical, "although cyclic." And I do
10:02:17 24 think that's important because what I think the patentees
10:02:19 25 are trying to say with that parenthetical, the word

10:02:22 1 "although" is, look, you could have polyrhythmic behavior.
10:02:26 2 Maybe you have it in a minute, maybe you have in it in
10:02:28 3 five minutes, maybe you have it over the course of an
10:02:31 4 hour. But they're saying it's not just it being
10:02:33 5 polyrhythmic but it being polyrhythmic and cyclic, meaning
10:02:37 6 that it has to take place within a cycle. And that's
10:02:41 7 referencing back to their definitional statement that a
10:02:44 8 cycle is one revolution of the flowhead.

10:02:45 9 And that's really important here because that's
10:02:47 10 what they've taught. They've taught how to create a port
10:02:50 11 design that will create a polyrhythmic pattern in one
10:02:52 12 cycle over one revolution. And I think they've reinforced
10:02:55 13 that throughout the specification as well as that
10:02:57 14 definitional statement.

10:03:02 15 So I thought if we go back to slide -- their
10:03:13 16 slide 7. Actually, one of the things I wanted to address,
10:03:18 17 your Honor, they say that cycle does not equal cyclic, and
10:03:24 18 they say that over and over again. I'm not really sure
10:03:25 19 what their basis for arguing that is. I mean, I agree
10:03:28 20 that those are two different words, but cyclic means based
10:03:32 21 on a cycle, right?

10:03:33 22 And, in fact, if you looked at their slide 7,
10:03:35 23 they've offered this definition. Again, the definition
10:03:37 24 wasn't in the record and wasn't in the briefing, but I'm
10:03:40 25 looking at it right now. It says, of or relating to or

10:03:44 1 characterized by cycles or, B, recurring or moving in
10:03:49 2 cycles. So the word "cyclic" actually does embrace and
10:03:54 3 require there be some amount of cycle.

10:03:57 4 You have to have and define a cycle, right? It's
10:03:59 5 not just repeating. Repeating's a broader word that means
10:04:03 6 it happens more than once. But cycle or cyclic, cyclic
10:04:07 7 means it has to take place within a defined period.
10:04:10 8 That's what a cycle is. It's a defined period. So you've
10:04:13 9 got this seasonal cycle, that's a defined period. In this
10:04:16 10 context and in the context of this patent, the patentees
10:04:19 11 have defined what a cycle is, and they've said that it is
10:04:21 12 one revolution of the flowhead.

10:04:23 13 If it would be helpful, your Honor, I could
10:04:33 14 address the eccentric motion aspect. I think that that's
10:04:36 15 been a little interesting or confusing to me because
10:04:41 16 counsel mentioned that this is a statement that comes from
10:04:44 17 the specification, and to be honest, your Honor, I'm not
10:04:51 18 seeing it. The figure that counsel had up here when it
10:04:54 19 was -- I believe it's slide 9 from their slides and in
10:04:59 20 which case, they say Rubicon does not dispute Dr. Sharma
10:05:01 21 's description. I do take issue with that. We do dispute
10:05:04 22 that one.

10:05:05 23 Our expert has his own explanation of what
10:05:09 24 eccentric motion means. And, in fact, what our expert
10:05:11 25 says is, people skilled in the art certainly were aware of

10:05:15 1 eccentric motion. It was something that they were trying
10:05:17 2 to eliminate from these type of tools. And this is what I
10:05:20 3 think's important when we take a look at what the
10:05:22 4 specification actually teaches. So that's this column up
10:05:24 5 here on the left. No. That's not that column. Where do
10:05:32 6 we have that? Sorry.

10:05:34 7 Oh, right. That's -- I think we've talked about
10:05:38 8 that. Let me go ahead to here.

10:05:43 9 THE COURT: Slide 23.

10:05:44 10 MR. NASH: Slide 23. And, your Honor, I
10:05:46 11 apologize, this is in the context of another claim. But
10:05:49 12 in this claim term, the eccentric motion thing came up
10:05:52 13 quite a bit, so that's where we've discussed it in our
10:05:54 14 slide deck. But it's -- they don't typically show us all
10:05:58 15 of what's being discussed here. But here's that
10:06:00 16 embodiment.

10:06:01 17 So they're talking about figure 3, and this is
10:06:03 18 what I would call like the general setup for the patent
10:06:06 19 where they're kind of walking through: What is a downhole
10:06:09 20 tool? What does it look like? It has a motor, it has
10:06:11 21 these components. And so, they're talking about it, and
10:06:13 22 they say you have rotor stator ratios. Here is a
10:06:17 23 six-to-seven ratio, although ratios may be employed. And
10:06:20 24 then, the next states, it will be understood by those
10:06:23 25 skilled in the art that for a certain ratio, the motion

10:06:25 1 induced in the rotor will be eccentric, and they made a
10:06:28 2 big deal about that statement, "eccentric."

10:06:29 3 But as you can see, this is all describing the
10:06:33 4 same embodiment. So the same embodiment where they
10:06:35 5 mentioned that in some ratios will have eccentric motion,
10:06:38 6 they talk about, well, we'll have a universal adapter 162.
10:06:42 7 And then, even further down, it says, we're going to also
10:06:44 8 have a radial bearing 174, and here's why that's
10:06:47 9 important.

10:06:48 10 The radial bearing 174 constrains the motion of
10:06:52 11 the flowhead to substantially rotational non-eccentric
10:06:56 12 motion. So they've recognized that for some ratios, you
10:07:00 13 might end up with eccentric motion, but don't worry, we've
10:07:03 14 taken care of that and eliminated it with this radial
10:07:06 15 bearing 172. So in the very same embodiment where the
10:07:09 16 word "eccentric" appears, they've done mechanical
10:07:13 17 adjustments to take out that eccentric motion.

10:07:14 18 So that's not something that's being taught by
10:07:16 19 this patent. They don't teach using eccentric motion for
10:07:19 20 anything here. I'm not sure how that plays into cyclic
10:07:23 21 because it wasn't really clear from their presentation,
10:07:25 22 but it certainly isn't a teaching of their patent. Now,
10:07:29 23 they've got expert testimony that talks a lot about
10:07:32 24 eccentric motion. We do, as well. And, frankly, it's
10:07:33 25 something that I think at this time in the art, people

10:07:36 1 were trying to eliminate, your Honor.

10:07:47 2 I'm going to go back to the cyclic polyrhythmic
10:07:51 3 aspect. I don't know if it would be helpful, your Honor.

10:07:54 4 They have talked about claim differentiation and things
10:07:56 5 being superfluous. I didn't see that reinforced today.

10:07:59 6 I'd be happy to address why that's not at issue here. And

10:08:02 7 I think we've already discussed the statement from the
10:08:04 8 column 3 where they said that this somehow excludes the
10:08:08 9 embodiment.

10:08:08 10 As I mentioned before, this just simply repeats
10:08:11 11 the word "cycle," once again, rather than describing the
10:08:15 12 full definition of that, which is a single revolution of
10:08:17 13 the flowhead.

10:08:18 14 THE COURT: I think I understood Mr. Fountain to
10:08:23 15 argue, at least either here or in papers, or both, that
10:08:28 16 figure 8B would support that it could be more than one.

10:08:38 17 MR. NASH: Polyrhythmic behavior over one cycle
10:08:40 18 -- more than one cycles? I'm not sure that I understand
10:08:43 19 how that's possible to get that reading out of here. So
10:08:45 20 if we take a look at what figure 8B describes and I think
10:08:48 21 slide 9 does a great job of illustrating -- it's talking
10:08:51 22 about figure 8B. And right there at the top of this
10:08:53 23 statement here -- so this is the transition from column 8
10:08:56 24 over to column 9. It says that figure 8B is showing the
10:09:00 25 rotational positions of the flowhead in a single cycle.

10:09:04 1 So you see the word "single cycle" there. And
10:09:06 2 then, when we go to column 10, it talks again about that
10:09:09 3 cycle and that cycle period and reinforces, again, that
10:09:12 4 you have over one revolution of the flowhead, you're going
10:09:16 5 to have polyrhythmic behavior --

10:09:18 6 THE COURT: You're a big fan of column 10.

10:09:21 7 MR. NASH: I love it. I think it's very -- it's
10:09:23 8 got all the right stuff for understanding what this term
10:09:25 9 means, your Honor.

10:09:27 10 THE COURT: So your position would be -- and I'm
10:09:29 11 trying to help Josh Yi understand how this patent stuff
10:09:33 12 works. Your position, your reliance for -- your primary
10:09:40 13 reliance in support of your position that it should be --
10:09:44 14 that the proposed court's construction is correct will be
10:09:48 15 found in column 10. That would be -- and I understand
10:09:52 16 that. And am I correct -- and they could correct me if
10:09:57 17 I'm not, but my sense is that the plaintiff would argue
10:10:02 18 that figure 8B would support their proposal.

10:10:07 19 MR. NASH: No. I think figure 8B supports our
10:10:10 20 proposal, your Honor.

10:10:12 21 THE COURT: Am I incorrect that Mr. Fountain
10:10:14 22 would take a different position?

10:10:16 23 MR. NASH: I don't know, actually. I didn't
10:10:18 24 gather that from his discussion. But I'd be happy to let
10:10:21 25 him respond, and then, I'd be happy to respond to that.

10:10:23 1 THE COURT: Why don't we do that. I may have
10:10:25 2 misunderstood. Let me hear from Mr. Fountain real quick.
10:10:29 3 I may have misunderstood. That was the way I took your
10:10:32 4 explanation what 8B showed with the different -- with the
10:10:35 5 way it cycled through.

10:10:38 6 MR. FOUNTAIN: But the way I'd say it, your
10:10:41 7 Honor, is figure 8B is not inconsistent with our proposal.

10:10:43 8 THE COURT: Okay.

10:10:44 9 MR. FOUNTAIN: Figure 8B is repeatedly called out
10:10:48 10 as one embodiment of the patent and the cyclic
10:10:52 11 polyrhythmic pattern. I don't believe that there's an
10:10:56 12 express discussion of 8B that talks about this eccentric
10:11:00 13 motion.

10:11:01 14 THE COURT: Yeah. I wasn't going with eccentric
10:11:03 15 motion. I was going with the number of revolutions. I
10:11:05 16 thought the way you explained 8B to me showed how this
10:11:11 17 actually operated.

10:11:13 18 MR. FOUNTAIN: 8B is -- certainly depicts one
10:11:15 19 revolution of the flowhead. I don't take issue with Mr.
10:11:18 20 Nash's description of what's in the figure. Of course,
10:11:21 21 that will continue to rotate as the tool is used. And for
10:11:25 22 the reasons I've stated, if the pattern is observed across
10:11:28 23 those rotations, they're totally consistent with the
10:11:31 24 language in the patent.

10:11:32 25 THE COURT: I've got it. Mr. Nash, why don't you

10:11:33 1 wrap up with anything you had, then I'll hear from Mr.
10:11:36 2 Fountain again.

10:11:37 3 MR. NASH: Yes, your Honor. I don't have much
10:11:38 4 further to state. It's just that you made a statement
10:11:40 5 that my strongest support is in column 10. And I do want
10:11:44 6 to just clarify that I think there's three aspects of this
10:11:49 7 patent that reenforce, that are very -- all equally
10:11:52 8 important. There's the definitional statement that we
10:11:55 9 have from column 8. I've got that reflected right here on
10:11:58 10 slide 8. That's the definitional statement i.e. Cycle is
10:12:03 11 expressly being defined by the patentees to mean one full
10:12:06 12 rotation of the flowhead.

10:12:08 13 I think equally powerful is the description of
10:12:11 14 column -- of figure 8B in that statement from column 10.
10:12:16 15 But also, just as important and I think what kind of
10:12:19 16 compels this construction is the initial discussion by the
10:12:22 17 patentee about what is a cyclic polyrhythmic pattern. And
10:12:25 18 you see that in column 2, lines 33 to 41, as column -- as
10:12:29 19 well as column 3, line 16 to 24, where it says, a cyclic
10:12:33 20 polyrhythmic pattern and then, immediately after that,
10:12:36 21 tells you what that means, and in that context, tells you
10:12:39 22 within a single revolution of the flowhead.

10:12:41 23 So you see that repeated in both of those
10:12:43 24 descriptions, within a single revolution of the flowhead,
10:12:46 25 because I believe that's also equally definitional. Thank

10:12:50 1 you, your Honor.

10:12:51 2 THE COURT: Mr. Fountain.

10:12:58 3 MR. FOUNTAIN: So, your Honor, I would like to
10:13:30 4 start where Mr. Nash finished off, and that is with column
10:13:33 5 3, lines 51 to 55. It's what Mr. Nash has articulated as
10:13:41 6 a definitional statement. This was what was shown on our
10:13:44 7 slide 12 where you had two different descriptions
10:13:47 8 side-by-side. This is the one that does not include the
10:13:49 9 language within one rotation of the flowhead.

10:13:51 10 And it's necessary for their position to say that
10:13:56 11 this is a description of a cyclic polyrhythmic pattern to
10:14:01 12 be limited to a single rotation of the flowhead to say
10:14:03 13 that the word "cycle," which is a different word than
10:14:07 14 "cyclic," limits everything that goes in the paragraph
10:14:10 15 because it's the only source of any suggestion of one
10:14:12 16 rotation of the flowhead.

10:14:14 17 If we look at a plurality of fluid pressure peaks
10:14:17 18 of varying amplitude, it says nothing about a cycle or one
10:14:22 19 rotation of the flowhead. If we look at a plurality of
10:14:26 20 time intervals of different durations between adjacent
10:14:30 21 fluid pressure peaks, it says nothing about a cycle or one
10:14:34 22 rotation of the flowhead. And to underscore the point
10:14:37 23 that I made at the end of my prior presentation, your
10:14:40 24 Honor, I've put this language back up on the slide and
10:14:43 25 I've scratched out the word "substantially stopped,"

1 right, because that's the first aspect that the patent
2 says is included in the cyclic polyrhythmic pattern.

3 To illustrate why the notion of a cycle can't
4 apply to what follows the first and/or, if we read this,
5 assuming that cycle refers to the plurality of fluid
6 pressure peaks of varying amplitudes, it says, the pattern
7 comprises at least one interval in its cycle where the
8 flow of the drilling fluid is a plurality of fluid
9 pressure peaks of varying amplitude.

10 I would submit that that is no longer English.
11 Or maybe it's English, but it's very bad English. Right.
12 You cannot have a plurality of peaks at at least one
13 interval in a cycle. This is consistent with what the
14 specification says. The definition of cycle that we
15 looked at where it says, i.e., one rotation of the
16 flowhead is merely a description of this first aspect of
17 the cyclic polyrhythmic pattern. At least one interval in
18 the cycle where the flow of the drilling fluid is
19 substantially stopped.

20 If you can't apply cycle to the remaining part of
21 that paragraph, then a construction that limits cyclic
22 polyrhythmic pattern to one rotation of the flowhead would
23 necessarily exclude two embodiments that the specification
24 clearly describes as being part of a cyclic polyrhythmic
25 pattern.

10:16:26 1 And if we could go back to slide 13. Now, this
10:16:41 2 illustrates, your Honor, why the claims show that limiting
10:16:46 3 cyclic polyrhythmic pattern to a single rotation at the
10:16:51 4 flowhead can't be correct. Right, what I've shown up here
10:16:55 5 is the end of claim, which recite that the fluid flow is
10:16:59 6 constrained to a cyclic polyrhythmic pattern. Now, for
10:17:02 7 illustration, we'll just go with Rubicon's construction,
10:17:05 8 but this would apply equally to your Honor's suggested
10:17:10 9 construction that included one rotation of the flowhead.

10:17:11 10 If the cyclic polyrhythmic pattern is construed
10:17:15 11 as limited to occurring within one rotation of the
10:17:19 12 flowhead, then the underlined language of claims 2 and 3
10:17:23 13 is wholly superfluous. Now, in its brief, Rubicon said
10:17:28 14 that we were arguing that this -- the construction of
10:17:31 15 cyclic polyrhythmic pattern would render all of claim 2
10:17:34 16 and all of claim 3 superfluous. This is not the argument
10:17:38 17 we made. We did make a claim differentiation. Our
10:17:42 18 argument, we stand by that.

10:17:43 19 But, in addition, that if cyclic polyrhythmic
10:17:45 20 pattern is already construed to mean within a single
10:17:48 21 rotation of the flowhead, then the following dependent
10:17:50 22 claim that says, the pattern comprising a plurality of
10:17:54 23 fluid pressure peaks of varying amplitude in the downhole
10:17:59 24 assembly is already limited to being required to occur
10:18:03 25 within a single rotation of the flowhead.

1 The construction that includes within one
2 rotation of the flowhead clearly renders the underlying
3 language within a single revolution of the flowhead
4 superfluous; that runs counter to basic claim construction
5 principles; and given all the other evidence I've gone
6 through in the specification, this is yet another reason
7 why the inclusion of that phrase in the construction is
8 inappropriate.

9 Now, Mr. Nash referred to a number of statements
10 that he described as definitional. And he said he really
11 liked claim 10.

12 MR. NASH: Column 10.

13 MR. FOUNTAIN: Column 10. Thank you. And so, I
14 put that up here. And the passage, I've kind of marked
15 off what he was reading from, and at the bottom, it's
16 referring to over one revolution of the flowhead. That's
17 near the bottom of this passage. But the beginning, the
18 part that introduces this part says, further, referring to
19 figure 8B, figure 8B is only one embodiment of this
20 patent. And sure, I agree that what follows in column 10
21 is a description of figure 8B. I agree that it's an
22 accurate description of 8B, but the role in construing
23 claims is not to read the claims in view of specific
24 embodiments.

25 Again, it doesn't account for the fact that the

10:19:33 1 passage in claim 3 does not include the similar limitation
10:19:36 2 with reference to peak amplitude or duration.

10:19:40 3 THE COURT: I missed you right after you said
10:19:42 4 column 3. I couldn't understand what you said.

10:19:43 5 MR. FOUNTAIN: Sorry. Does not account for
10:19:46 6 column 3's disclosure or description of a cyclic
10:19:49 7 polyrhythmic pattern without any reference to one rotation
10:19:53 8 of the flowhead with respect to varying peak amplitude and
10:19:57 9 varying duration between the peaks.

10:19:59 10 THE COURT: Okay.

10:20:00 11 MR. FOUNTAIN: The last point I will make in this
10:20:04 12 round, your Honor, is refer the Court to figure 14.
10:20:21 13 Figure 14 is a flowhead. It is a flowhead with a
10:20:25 14 symmetric arrangement of ports around a center flowthrough
10:20:29 15 port. And the specification says very clearly that this
10:20:33 16 arrangement, symmetrically arranged ports, can cause a
10:20:38 17 cyclic polyrhythmic pattern.

10:20:40 18 Now, you could have varying arrangements in the
10:20:44 19 flow restrictor, but you could use this flowhead
10:20:47 20 arrangement and the eccentric motion of the rotor and part
10:20:51 21 into the flowhead as the specification discloses. And
10:20:54 22 when this valve rotates and walks around, it will create
10:20:58 23 the cyclic polyrhythmic pattern exactly as explained by
10:21:03 24 Dr. Sharma.

10:21:04 25 Mr. Nash spent a lot of time talking about an

1 example embodiment that included a universal adapter, that
2 included a radial bearing to eliminate that walking-around
3 motion of the flowhead. But, again, I'll remind the Court
4 that that's an example embodiment, and those features, the
5 radial bearing and the universal adapter, are recited in
6 dependent claims 10, 14 and, I believe, 35. They do not
7 appear in claim 1. And the specification's disclosure of
8 certain optional features that can eliminate or constrain
9 the eccentric motion of the rotor have no place in being
10 used to limit the scope of a term in claim 1 that clearly
11 does not require those optional features.

12 Unless your Honor has further questions, I
13 believe I've responded to Mr. Nash.

14 THE COURT: I don't.

15 MR. FOUNTAIN: Thank you, your Honor.

16 THE COURT: Mr. Nash, if you want to at least
17 cover the arguments that were just made with respect to
18 column 3 and figure 14 and then, anything else you want.

19 MR. NASH: Yes, your Honor. Thank you very much.
20 I'll give brief 45 minutes to address those issues.

21 So I'm going to put this up there. Hopefully
22 that's visible. I'll go in the order I found. I found
23 four things that I thought I could respond to, but if your
24 Honor would like, let's start at column 3. So that
25 statement he's referring to and we could pull that back up

1 if we need to, but remember it's got the word "cycle" in
2 it and it says with -- it says cyclic polyrhythmic and
3 then, directly following that, it starts discussing within
4 an interval of a cycle, multiple amplitudes or multiple
5 intervals, right? So this would be an example of that
6 where we see a cycle, so that's a single revolution of the
7 flowhead.

8 THE COURT: Within 360 degrees.

9 MR. NASH: That's 360 degrees. And you see that
10 there are four peaks in a cycle. An interval of that
11 could have two or maybe three. Maybe there's three bumps
12 in a row that are all the same and then, a fourth bump
13 that pops up, right? That's what that statement's
14 referring to, I believe, is that you can have an interval
15 within a cycle that might have polyrhythmic behavior, as
16 well.

17 So there's a subset of a cycle that could have
18 polyrhythmic behavior. Of course, the cycle itself then
19 has polyrhythmic behavior. Does that make sense?

20 THE COURT: Yes, sir.

21 MR. NASH: Okay. That's how we understand that
22 statement in column 3. And that's exactly why our
23 construction and the construction that your Honor offered
24 prior to this hearing.

25 THE COURT: Within one revolution within -- on

10:23:45 1 your -- on the handwritten thing that you have up there is
10:23:50 2 -- would comply with your -- with the construction that
10:23:52 3 the Court proffered.

10:23:55 4 MR. NASH: Yes.

10:23:55 5 THE COURT: Because those would take place
10:23:57 6 within --

10:23:57 7 MR. NASH: Entirely consistent with this type of
10:23:59 8 illustration. Yes, your Honor.

10:24:00 9 So I'm not sure if your Honor needs to hear about
10:24:15 10 claim differentiation and -- okay. We'll skip that. But
10:24:19 11 claims 2 and 3, we believe, aren't superfluous. They
10:24:22 12 certainly add additional limitations.

10:24:24 13 With respect to claim 14, I don't think I have --

10:24:29 14 THE COURT: I think figure 14.

10:24:31 15 MR. NASH: Figure 14. Thank you. I don't have a
10:24:34 16 pretty slide to that effect, your Honor, but I think
10:24:36 17 what's important about figure 14 -- and I think I do have
10:24:39 18 a little bit of the statement about 14 in the context of
10:24:41 19 one of my other claim discussions. Here we go. If you
10:24:44 20 look at the right-hand side of figure -- of slide 22,
10:24:48 21 there's the only description that we have of figure 14
10:24:52 22 from the patent. This comes from column 12, lines 6 to
10:24:56 23 19.

10:24:56 24 What we see here is, it's talking about figures
10:24:59 25 13 and 14. And this isn't something that was really

10:25:02 1 discussed much in the briefing. Certainly that picture
10:25:04 2 that he showed is an accurate reflection of figure 14, but
10:25:08 3 what's important is that this is just the flowhead. So
10:25:10 4 they call that flowhead 900.

10:25:12 5 And the reason why that's important, your Honor,
10:25:14 6 is because the patent is reenforced, over and over again,
10:25:19 7 when it's describing how to achieve polyrhythmic behavior.
10:25:23 8 It says that you can do it in the -- you can make changes
10:25:25 9 in the flowhead or you can make changes in the flow
10:25:28 10 restrictor, right? Because each of them have a plurality
10:25:30 11 of ports. And so, while you may have symmetric equally
10:25:33 12 sized and equally spaced port designs in the context of
10:25:37 13 the flowhead, you would need a flow restrictor with a
10:25:41 14 different configuration.

10:25:42 15 So if we look back at, say, here, I believe
10:25:46 16 figure 6 and 7 is reflecting a flow restrictor, okay? And
10:25:50 17 so, on a flow restrictor like the one illustrated here in
10:25:54 18 figure 7, we have differently sized port designs. And as
10:25:58 19 the patent teaches, it's the number, position and
10:26:02 20 dimensions of those ports, how they're arranged that
10:26:04 21 creates the polyrhythmic behavior.

10:26:05 22 So I'm not sure what else was to be taken from
10:26:10 23 figure 14. Certainly if your Honor has more questions
10:26:12 24 about it, I'd be happy to address them. But I think
10:26:15 25 figure 14 is entirely consistent with our construction,

1 and it's consistent with our understanding of what the
2 patent is teaching.

3 The only other thing that I noted that I thought
4 I might respond to is counsel's statement that we are
5 relying on only one embodiment, and that's the figure 8
6 embodiment. And I know I've mentioned this, your Honor.
7 I won't belabor it again, but it's not that we're relying
8 on one embodiment. We're relying on the patentee's own
9 definition of what constitutes a cycle. And the patentee
10 defined it in columns 2 and 3, and then, it reinforced
11 that definition again in column 8, when it used the Latin
12 i.e. to mean that is one revolution of the flowhead. And
13 so, you see that definition being consistently applied in
14 the beginning, middle and end of this patent.

15 Unless your Honor has further questions, I'm
16 happy to sit down.

17 THE COURT: Mr. Fountain, anything additional?

18 MR. FOUNTAIN: No, your Honor.

19 THE COURT: Okay. We're going to take a
20 five-minute -- a very brief recess and I'll come back out
21 probably -- most likely be able to give you a construction
22 today, and then, we will take up the next claim term. So
23 if you need to powder your nose or do anything else,
24 that's fine, as well. But we'll be gone for just a couple
25 of minutes.

(Recess.)

THE COURT: Let me just make this statement on the record. That was absolutely one of the best arguments from both sides that I've had. I regret that I'm going to have to pick one only. And that if there was a way that you both would win, it would be arguments as good as those. Very compelling. But I get paid to make the decision.

What I'm going to do is, I'm going to mostly stick with the construction I told you I was going to use. The only difference is, which is not much of a difference, but I'm going to add the words "a pattern of," colon, to begin the construction that I gave you. So the entire court construction for a cyclic polyrhythmic pattern will be a pattern of, colon, two or more different rhythms within one revolution of the flowhead wherein a rhythm refers to either varying amplitude or duration between pressure peaks.

The next claim term we have to take up is the claim term "such that fluid pressure resulting from fluid flow through the ports of the flowhead and the flow restrictor is constrained to a cyclic polyrhythmic pattern." The plaintiff has proposed no construction necessary. The Court has indicated that that is going to -- we are going to go with the plain and ordinary meaning.

10:40:41 1 Therefore, I'll ask Mr. Nash to go.

10:40:45 2 MR. NASH: Thank you, your Honor.

10:40:47 3 And I did confer with opposing counsel right
10:40:49 4 before this about this term. We don't have agreement
10:40:53 5 certainly, but where we wanted to make sure we had
10:40:57 6 clarification, I think your Honor just provided it, was
10:40:59 7 that Rubicon's position from the beginning has also been
10:41:01 8 that the plain and ordinary meaning would govern. In
10:41:04 9 fact, we're totally fine with the claim language as it is.

10:41:06 10 But it was only through the parties' discussions
10:41:09 11 that we came to understand that the parties are kind of in
10:41:12 12 dispute over what plain and ordinary meaning is in this
10:41:15 13 context. And so, we have kind of an 02 Micro problem, if
10:41:19 14 you will, that we would like your Honor's guidance on.

10:41:22 15 So with the assumption that your Honor is sort of
10:41:26 16 embracing their side, I thought I would go first, and it
10:41:29 17 sounds like your Honor would appreciate that.

10:41:31 18 THE COURT: And at least now, as of now, we don't
10:41:39 19 believe that the proper understanding of plain and
10:41:51 20 ordinary meaning would require an arrangement of the ports
10:41:54 21 limitation that you're advocating.

10:41:56 22 MR. NASH: Yes. Understood, your Honor.

10:41:57 23 THE COURT: So that's the up -- that's the road
10:42:00 24 up which you are going uphill.

10:42:03 25 MR. NASH: Understood. Well --

10:42:04 1 THE COURT: And is that the fight that you all
10:42:06 2 think you have, as well, in terms of the 02 Micro? Or is
10:42:09 3 there something more than that?

10:42:11 4 MR. NASH: I think that's fair, your Honor. I
10:42:14 5 think that if I was to articulate where I think the
10:42:16 6 dispute lies is that we believe that it's the ports that
10:42:21 7 create the polyrhythmic pattern. And specifically, how
10:42:23 8 the ports come into and out of alignment is based
10:42:27 9 certainly on the port design, and that's what creates
10:42:30 10 polyrhythmic behavior. And that's the only thing that the
10:42:32 11 patent teaches.

10:42:33 12 I believe that they have conceded that the ports
10:42:37 13 going into and out of alignment creates the polyrhythmic
10:42:39 14 pattern, as opposed the something else, I suppose. But I
10:42:42 15 believe that they would like that to be broader in the
10:42:45 16 sense that -- actually, we'll have to see what they have
10:42:48 17 to say about it.

10:42:50 18 But it seemed at some point, that maybe we don't
10:42:53 19 have that much of a dispute. So perhaps we could get to
10:42:56 20 some resolution here today on that.

10:42:58 21 THE COURT: Yeah, we are -- it is unlikely we
10:43:02 22 will find -- we will take the position that you are
10:43:05 23 advocating with regard to the arrangements of the ports.

10:43:10 24 MR. NASH: Sure. And to be clear, your Honor,
10:43:11 25 we're not beholden to the word "arrangement." We do

10:43:17 1 think, though, that it's the ports that cause this
10:43:20 2 polyrhythmic behavior. I'd be happy to walk briefly
10:43:22 3 through that.

10:43:23 4 THE COURT: Sure.

10:43:24 5 MR. NASH: I think if your Honor will join me, we
10:43:28 6 believe that the structure and plain language of the
10:43:31 7 meaning -- sorry, plain meaning of the claim language
10:43:34 8 dictates this requirement. We also believe that it's a
10:43:36 9 consistent message that's being told throughout this
10:43:40 10 patent. And importantly, there is no other teaching in
10:43:44 11 this patent on how to achieve polyrhythmic behavior. And,
10:43:47 12 so, with those three things all coupled together, we do
10:43:49 13 think that there is an indication in the claim language
10:43:53 14 itself, as well as throughout the teaching of this patent,
10:43:55 15 that there's a requirement that the port design be what
10:43:58 16 creates the polyrhythmic behavior.

10:43:59 17 So I'll start just a brief look at the claim
10:44:03 18 language. I know your Honor's studied this extensively,
10:44:05 19 and we've already talked about cyclic and polyrhythmic
10:44:09 20 patterns. But as we see from this aspect of the claim
10:44:11 21 language, that whole wherein clause has a lot of causation
10:44:14 22 aspects to it. It talks about the motor causing the ports
10:44:17 23 to enter into and out of alignment. It's not just going
10:44:22 24 into and out of alignment, but the ports go into and out
10:44:25 25 of alignment in such a way such that the fluid pressure

10:44:29 1 resulting from that is constrained to a polyrhythmic
10:44:33 2 behavior.

10:44:33 3 So what I think's important and the reason why we
10:44:36 4 had to highlight this issue is, in our initial discussions
10:44:39 5 and what I saw in the original brief from Impulse was that
10:44:45 6 anything could be creating the polyrhythmic pattern. You
10:44:47 7 simply had to show that there's a polyrhythmic pattern and
10:44:50 8 you've met the limitation. I think they've changed their
10:44:52 9 position a little bit, your Honor, and we may be getting
10:44:54 10 closer to joining the issues on this.

10:44:56 11 THE COURT: Well, here is what I think, at least
10:45:00 12 at the moment, is -- and I face this a lot. You know,
10:45:05 13 when I was on y'all's side and people did plain and
10:45:10 14 ordinary meaning, I always thought that was kind of a --
10:45:14 15 judges were, in a lot of ways, dodging having to make a
10:45:17 16 harder decision. What I'm learning from being on this
10:45:21 17 side of the bench is, oftentimes, what usually defense
10:45:28 18 counsel is arguing is, they want -- they don't want the
10:45:33 19 plaintiff to have more field than what the plain and
10:45:39 20 ordinary meaning ought to be, and they want me to put that
10:45:42 21 in the claim construction.

10:45:49 22 What I have found, I think, is the more likely --
10:45:52 23 is the better way of dealing with this, rather than the
10:45:58 24 way you're suggesting right now is, I don't think
10:46:03 25 construction's necessary. And I think were the plaintiff

10:46:08 1 to take and their expert to take a position that you
10:46:12 2 thought was in -- I think this language is pretty clear
10:46:16 3 for example.

10:46:17 4 MR. NASH: We do, too, your Honor.

10:46:18 5 THE COURT: I think if you -- if their expert
10:46:22 6 were to take a position that your company infringed that
10:46:26 7 was outside of what these words say, the proper way for me
10:46:31 8 to deal with this is not at the claim construction phase
10:46:36 9 because we're not really helping the jury here, either, to
10:46:38 10 tell the truth. It would be a summary judgment saying
10:46:41 11 they're wrong, or Daubert, but whatever it is. And so, to
10:46:46 12 me, on this -- for example, on this specific claim term,
10:46:50 13 that's the way I think it ought to be dealt with.

10:46:53 14 I mean, I have as high respect for plaintiff's
10:46:58 15 counsel as I could possibly have, and so, I'm certain that
10:47:03 16 they are going to not give you the opportunity to file a
10:47:08 17 motion for summary judgment by claiming infringement that
10:47:11 18 exceeds what that language says; but in the event that you
10:47:13 19 think that they do, I think that would be the better time
10:47:17 20 to take this up. Because I don't think, in some ways, the
10:47:23 21 juice is worth the squeeze here in terms of coming up with
10:47:28 22 a claim construction. It's just trying to put into words
10:47:32 23 what you think they have to prove.

10:47:35 24 Does that make sense?

10:47:36 25 MR. NASH: Yeah. It does your Honor. And I

10:47:38 1 understand what you're describing, which is that, really,
10:47:40 2 there's a better stage to take the stand on this.

10:47:43 3 THE COURT: That's right. I don't see this
10:47:46 4 helping the jury by taking one sentence that's 30 words
10:47:53 5 long and replacing it with another sentence that's 30
10:47:56 6 words long.

10:47:57 7 I understand what you are -- the position you're
10:48:02 8 taking with what has to happen. And if their expert takes
10:48:06 9 the position that's inconsistent with the language that's
10:48:09 10 here, I would think you would be able to let me know, and
10:48:12 11 we could take it up at later time.

10:48:14 12 MR. NASH: Understood, your Honor.

10:48:16 13 If I may just for a few moments.

10:48:19 14 THE COURT: Sure.

10:48:19 15 MR. NASH: If the Court would indulge me, I would
10:48:22 16 like to kind of explain why I think there is an importance
10:48:25 17 to this aspect.

10:48:26 18 You may be right that perhaps the construction
10:48:28 19 aspect isn't really the appropriate venue, although I do
10:48:32 20 think that there is the ability to clarify what a plain
10:48:35 21 and ordinary meaning would be with an instruction to the
10:48:37 22 jury that could be helpful here. So not necessarily
10:48:39 23 construing the claim but, rather, saying the words mean
10:48:42 24 what say, and that means that you would look to the port
10:48:46 25 design to determine if it creates a polyrhythmic behavior.

1 So I think why this might be important to do at
2 this stage is that it could dictate the scope of discovery
3 and the disputes. It could resolve some disputes before
4 they even start in terms of what we're looking for to
5 determine whether or not there is infringement. Because
6 as this patent teaches and as the patentees tried to
7 explain with all these figures and extensive discussion is
8 its port design that their -- their intended method of
9 creating polyrhythmic behavior was the port design. And
10 that's evident by virtue of the fact that you just flip
11 through these figures, your Honor, and all the figures
12 show is various port configurations.

13 There's multiple different port configurations.
14 And so, when you look to do I infringe or not, or is this
15 invalid or not, that's what you should be able to look to,
16 as well. We'll look at the port designs, we'll see how
17 the ports are designed to operate, right? And why that's
18 important, your Honor, is because if we aren't being clear
19 about that, that you can look just to the port design to
20 determine the polyrhythmic behavior, we may get into a
21 situation where there's all this additional complication:
22 Oh, well, what's this about the motor? And what's this
23 doing and what's that doing? But, really, all this patent
24 is about is port design.

25 I don't know if it would be helpful, your Honor,

10:50:04 1 but if it's okay, I would like to kind of briefly touch on
10:50:07 2 the aspects of the specification that reflect that.

10:50:08 3 THE COURT: I think my clerks and I have been
10:50:10 4 through that pretty carefully. I think unless plaintiff's
10:50:17 5 counsel just has a burning desire to stand up and speak,
10:50:20 6 even though I'm going to rule in their favor, here's the
10:50:26 7 way I see it.

10:50:28 8 I'm going to go with no construction necessary.
10:50:32 9 And the order that we write will probably make it clear
10:50:38 10 that there is no reading of requiring arrangement of the
10:50:42 11 ports limitation into the claim. But I will let the
10:50:48 12 plaintiff know that from our reading of the patent, it
10:50:55 13 would be -- we didn't see anything other than the
10:50:58 14 arrangement that affects the alignment, which is, I think,
10:51:01 15 what you were saying, Mr. Nash.

10:51:03 16 MR. NASH: Yes, your Honor.

10:51:04 17 THE COURT: And so, again, I think the better
10:51:09 18 time to take this up -- that's my claim construction. But
10:51:13 19 the Court will certainly -- once you have their
10:51:17 20 infringement contentions, if you think it falls outside
10:51:20 21 the ambit of what is required in the patent, we'll take it
10:51:24 22 up at summary judgment and at a hearing.

10:51:27 23 MR. NASH: Great. Thank you very much, your
10:51:29 24 Honor.

10:51:29 25 THE COURT: I didn't -- I actually asked if the

10:51:31 1 plaintiff wanted to say anything.

10:51:33 2 MR. FOUNTAIN: I think we made our position clear
10:51:35 3 in the brief, and we're fine with your Honor's articulated
10:51:38 4 one.

10:51:39 5 THE COURT: Next up is "arranged around a central
10:51:46 6 axis." The defendant has argued that it's indefinite. I
10:51:51 7 understand why he has. I'll hear from the plaintiff as to
10:51:56 8 why it's not first. I'm sorry. I got it backwards. I'm
10:52:03 9 going to hear from -- I didn't get home till late last
10:52:07 10 night. I'll hear from the defendant as to why you believe
10:52:09 11 it's indefinite. I know that the -- I know the plaintiff
10:52:13 12 does not think it's indefinite.

10:52:14 13 MR. TEPERA: Your Honor, may it please the Court.
10:52:33 14 I'm Steven Tepera on behalf of Defendant Rubicon. And I'm
10:52:38 15 handling each of the indefiniteness claims that we're
10:52:41 16 going to be doing today.

10:52:41 17 THE COURT: Well, then, why don't we, unless the
10:52:43 18 plaintiff doesn't want to, can we take those up together
10:52:47 19 and you go and then, y'all will go? Do you care? Or do
10:52:50 20 you think they should be done independently?

10:52:54 21 MR. GUARAGNA: I think we can go in series, your
10:52:56 22 Honor. That's fine with me.

10:52:56 23 THE COURT: Okay.

10:52:57 24 MR. TEPERA: Thank you.

10:52:59 25 The first indefiniteness claim, your Honor, is

1 arranged around a central axis. We claim that it's
2 indefinite. The plaintiff has claimed alternate positions
3 in its initial brief. No construction necessary. Or
4 distributed between the center and the periphery of the
5 flowhead. I know your Honor's looked at this quite a bit,
6 but it appears in the second limitation of the independent
7 claims.

8 And what is it that's arranged around the central
9 axis, it says, the flowhead comprises a plurality of
10 ports, and they are arranged around the central axis of
11 the flowhead. To understand, I think, our position here,
12 it's useful to back up and understand how this patent was
13 put together. Seems very clear to us that the inventors,
14 when they were writing this patent, put together an
15 invention where they had conceived a three-port scenario,
16 a four-port scenario, a five-port scenario, and that's
17 reflected throughout the specification.

18 Each of the figures as Mr. Nash just discussed,
19 you flip through all figures, they all look like various
20 port configurations. And, of course, the descriptions
21 that go along with that have similar descriptions of three
22 ports, four ports, five ports scenario, and there's text
23 hence throughout, but that's the case, as well, different
24 things sort of imply at least three ports, four ports,
25 five ports and up.

1 But in the course of writing the claims, as
2 patent prosecutors tend to do, they like to use the word
3 "plurality," and that's what snuck into the claim to start
4 with, a plurality of ports that are arranged around the
5 central axis. And we acknowledge that plurality means two
6 or more. Where the indefiniteness comes in, your Honor,
7 is the tension that arises with the positional statements
8 of where those ports are arranged because we think that
9 the positional statements require that it be three or more
10 whereas the word "plurality" is two or more, and that
11 irreconcilable conflict leads to an indefiniteness
12 conclusion.

13 We think on our side, we have kind of the plain
14 and ordinary meaning of arranged around as this encircling
15 on all sides in every direction. Or the figures all are
16 consistently shown an arrangement around. In fact,
17 there's little circles that are drawn in several figures
18 around the central axis. The Federal Circuit has
19 conveniently construed "around" before to mean on all
20 sides on this Pods case. And, in fact, we think the
21 litigants here today both sort of embraced the same
22 meaning of "arranged around" in their opening brief. We
23 both latched onto the same example of it's like arranging
24 chairs around a table.

25 Dr. Noynaert, in his declaration, gives a good

10:55:42 1 explanation of what it means to be arranged around and why
10:55:44 2 it implies three or more. He synthesizes the figures, the
10:55:48 3 specification, basic geometry, and his knowledge as a
10:55:52 4 skilled artisan of what it would mean, and he provides
10:55:55 5 these examples that I've included here.

10:56:00 6 For instance, the top left in a four-port
10:56:03 7 scenario, the four ports suggest an area between them that
10:56:06 8 captures the central axis, right? Those are arranged
10:56:09 9 around the green central axis there, and he contrasts that
10:56:14 10 with one where a skilled artisan would look at this patent
10:56:16 11 and understand that they are not arranged around a central
10:56:19 12 axis. We have the four-port scenario on the second image.
10:56:21 13 Those are arranged around something other than the central
10:56:23 14 axis.

10:56:24 15 And it happens to conveniently also have figure 7
10:56:28 16 in the patent, have a similar sort of description to it.
10:56:30 17 It has that circle drawn in phantom to show and, sure
10:56:33 18 enough, they capture the central axis there. He contrasts
10:56:37 19 it with the two-port scenario, and that's an important
10:56:40 20 embodiment that we're going to be looking at in this case
10:56:42 21 in general, and says you can't arrange two ports around
10:56:45 22 something. It doesn't suggest a captured area, right?
10:56:49 23 Two ports suggest a line. A line segment, there is no
10:56:52 24 area there. And so, he provides these twelve examples.

10:56:56 25 How would a skilled artisan understand whether or

1 not in these two example -- in these 12 examples, whether
2 or not they were arranged around a central axis? He says
3 they don't suggest any sort of captured area. His example
4 -- his geometric kind of explanation of that is, well,
5 because two ports, you could draw an infinite number of
6 circles that capture areas outside, it captures inside,
7 contrast that with three ports or more scenario, which
8 would suggest a unique circle, as you see in the red
9 dotted lines in phantom in the above. So that's the
10 general idea.

11 You need to have a sufficient number of ports to
12 suggest this captured area, and it requires at least three
13 ports to do that. By analogy, if we had a plurality --
14 we're claiming a barstool and there is a plurality of legs
15 arranged to support the seat, and you think, okay, that's
16 three legs, four legs, five legs, it should raise a red
17 flag in your head when you think that actually includes
18 two legs and that doesn't really accomplish -- you can't
19 arrange them to accomplish what you said there or arrange
20 a plurality of points on vertices of a triangle, okay?
21 You can do three, you can do four, you can do 20 and dot
22 around a triangle. But you can't really do two and have
23 that arrangement that is required there, and that's our
24 general argument.

25 THE COURT: Is there anywhere in the patent they

10:58:16 1 disclaim having only two ports?

10:58:20 2 MR. TEPERA: We think it's implicit in this
10:58:22 3 arrangement language if you really go Phillips. Let's
10:58:25 4 stick with the arrangement language, with the claim
10:58:28 5 language, rather, we think it's implicit in there. But
10:58:31 6 there is not -- I'll concede there's not express statement
10:58:32 7 that two is not included, and, indeed, plurality includes
10:58:37 8 two more.

10:58:37 9 THE COURT: Or that it has to be three or more?
10:58:40 10 Is there anywhere in the patent that indicates it has to
10:58:42 11 be three or more? I get the implicit. I don't need to
10:58:44 12 hear the implicit again. Is there anywhere in the patent
10:58:47 13 where it explicitly indicates that there need to be three
10:58:52 14 or more?

10:58:53 15 MR. TEPERA: There are different examples of
10:58:55 16 three or more certainly. There is argument that we've
10:58:58 17 presented in the brief that says some pulses can be the
10:59:00 18 same and some pulses can be different. That implies three
10:59:03 19 or more in order to get polyrhythmic, which I think is
10:59:07 20 consistent with the construction that we're getting today
10:59:08 21 on polyrhythmic behavior. I agree that there's nothing
10:59:11 22 that says it has to be three. But that is not explicit.

10:59:15 23 THE COURT: Polyrhythmic is just one or more.

10:59:18 24 MR. TEPERA: I think that's true with varying
10:59:21 25 amplitudes or varying time intervals between them, which

10:59:24 1 seems to be what the Court is construing today, and that
10:59:27 2 would, at least in our understanding of how the ports
10:59:31 3 work, require at least three ports to have different
10:59:33 4 spacing between them. Between the peaks.

10:59:37 5 Impulse -- at least the lack of clarity of the
10:59:43 6 term, I think, is sort of made by Impulse's varying
10:59:46 7 positions throughout the briefing where they latch onto
10:59:49 8 one definition or another through the various briefs. In
10:59:52 9 the first brief, they have two very different
10:59:54 10 constructions of it's sort of like chairs around a table.
10:59:57 11 We don't really take issue with that. We sort of agree
10:59:59 12 that that's what it is. But, also, very differently is
11:00:01 13 distributed between the center and the periphery of the
11:00:03 14 flowhead, very unlike arranged around a table.

11:00:06 15 In the next brief, they say, well, any port is
11:00:08 16 arranged around the central axis because it's going to
11:00:12 17 spin around the central axis when you rotate this. And
11:00:15 18 then, they latch onto a dictionary definition of to go
11:00:19 19 around or to avoid like a car driving around the lake, the
11:00:22 20 road goes around the lake. And I think the very fact that
11:00:24 21 we have these four very different definitions they latched
11:00:27 22 onto indicate that there's some lack of precision that
11:00:31 23 probably doesn't meet the Nautilus standard of reasonable
11:00:36 24 certainty that needs to be provided on the scope of these
11:00:38 25 claims.

11:00:38 1 And so, we have the stationary definition, the
11:00:40 2 rotating definition, the distributed definition, the
11:00:43 3 avoiding definition, all of which plaintiffs have
11:00:45 4 provided. And we can go through and attack those sort of
11:00:49 5 one at a time and show why individually they're not good.
11:00:52 6 I'll just really quickly go through these because I don't
11:00:54 7 think the Court's actually going to be construing this
11:00:56 8 term to mean any one of those but -- based on its
11:00:59 9 preliminary constructions.

11:01:00 10 But distributed between the center and the
11:01:03 11 periphery of the flowhead, first obviously it's nothing
11:01:07 12 like their other construction that they give in the same
11:01:09 13 brief, and that tension, I think, is apparent with the
11:01:13 14 chairs around the table. It's basically meaningless. It
11:01:16 15 doesn't have any sort of restriction on where you put the
11:01:19 16 ports. And the word "between" really jumps out at me.
11:01:22 17 When I'm seeing that, it seems almost the opposite of
11:01:25 18 around. To arrange something between two points, it seems
11:01:28 19 very dissimilar to arranged around something.

11:01:31 20 And I think it's important, also, to point out
11:01:34 21 where they get this from. In column 12, a description of
11:01:37 22 figure 14, there is a description head ports on this
11:01:41 23 particular valve are distributed between the central axis
11:01:47 24 and the periphery of the flowhead, just like they are in
11:01:49 25 the other ports.

11:01:51 1 And it's true that it's described in there, but
11:01:53 2 there's nothing in there that indicates this means the
11:01:55 3 same thing as arranged around. It's not a substitution of
11:01:58 4 one for the other. And importantly, I think the
11:02:03 5 consequence of that, of grabbing onto that language in the
11:02:06 6 specification and claiming that this claim language means
11:02:08 7 this, ends up doing what defendants are often accused of
11:02:15 8 doing, which is importing limitations from the
11:02:17 9 specification into the claim.

11:02:19 10 Now they have this distribution limitation and
11:02:24 11 they have imported that in the claim; but in addition to
11:02:26 12 doing that, they've been able to delete the actual claim
11:02:30 13 language that's in there. So no longer do they have to
11:02:32 14 actually show it's arranged around. They just need to
11:02:34 15 show that it's distributed. So it's the substitution of
11:02:37 16 the actual claim language for what they wish was the claim
11:02:40 17 language.

11:02:40 18 The next in the responsive brief, they have the
11:02:45 19 rotating around the flowhead. A few major red flags with
11:02:49 20 respect to that is, note that that doesn't even require a
11:02:52 21 plurality of ports for one. If anything spins around, the
11:02:56 22 central axis is arranged around it, then a single port
11:02:59 23 could be arranged around it because it would rotate around
11:03:02 24 the flowhead.

11:03:03 25 But, more importantly, I think from a claim

1 language perspective is, that movement is already built
2 into that very limitation in the claim. We have a
3 plurality of ports arranged around the central axis, which
4 is this placement sort of implication, but it's placed on
5 a flowhead, which is driven by the motor around the
6 central axis.

7 So we already have this requirement in the patent
8 that these ports move around the central axis. And so,
9 what they've done is, they have duplicated that limitation
10 with the effect of eliminating the actual arrangement of
11 ports there.

12 And the final definition that they grabbed onto
13 is, it's like a road going around a lake or a car driving
14 around a lake. There's no explanation of how you would
15 apply that to ports that aren't moving. There's no
16 declaration that's associated with that. It's just very
17 dissimilar to everything else that is in the pleadings
18 until now.

19 One thing that's also worth pointing out in this
20 is, amongst the various definitions, you have distributed,
21 you have this moving around. Think about what sort of
22 arrangements would fall within the scope of that. It
23 seems to me that even the second figure, the four ports
24 that are off center would be distributed between the
25 central axis and the flowhead. They would also be

11:04:27 1 rotating around the central axis.

11:04:29 2 And the only record evidence, and it seems
11:04:32 3 intuitively correct, is Dr. Noynaert saying a skilled
11:04:35 4 artisan would never understood that second figure to be --
11:04:37 5 have ports distributed around the central axis. The
11:04:40 6 constructions are very nonintuitive, and there's no expert
11:04:43 7 testimony or no indication that a skilled artisan would
11:04:46 8 understand it to mean what it is that they explain.

11:04:49 9 THE COURT: Is there any argument that one
11:04:56 10 skilled in the art would not be able to determine what --
11:04:59 11 based on what the patent is talking about with regard to
11:05:00 12 what the central axis is?

11:05:04 13 MR. TEPERA: There's no dispute of that. We
11:05:05 14 concede it as the center point of the -- there's Dr.
11:05:10 15 Noynaert has this nice figure, shows cross hairs and the
11:05:13 16 red dot being the center point that's consistent with
11:05:16 17 these constrained valves rotating within the bearing like
11:05:20 18 Mr. Nash has indicated. And so, it's the very center
11:05:23 19 point of what it is, and I don't think that Impulse has
11:05:24 20 argued otherwise.

11:05:25 21 THE COURT: And so, your argument is only that
11:05:29 22 whether or not the ports are arranged around a central
11:05:32 23 axis could be understood by one skilled in the art.

11:05:35 24 MR. TEPERA: When applied to as few ports as
11:05:38 25 Impulse is trying to apply it to, which is two-port

11:05:41 1 scenario.

11:05:41 2 THE COURT: Okay.

11:05:42 3 MR. TEPERA: There are a few arguments that are
11:05:44 4 in the briefs that I think are worth addressing where they
11:05:47 5 attack our position. They attack our fundamental position
11:05:51 6 that the patent doesn't have an explicit disclosure of two
11:05:56 7 ports. And they have this excerpt that says the
11:05:59 8 specification provides specific examples of flowheads with
11:06:02 9 four ports and three ports. I have a red highlight, it's
11:06:05 10 hard to see but explains that fewer ports may be provided.

11:06:09 11 Well, the specification doesn't say that. The
11:06:10 12 specification is talking about figures 4 and 5 of that
11:06:14 13 portion of the patent that says in figures 4 and 5, the
11:06:19 14 body is provided with four ports, although more or fewer
11:06:22 15 are -- may be provided. And you can contrast that with
11:06:26 16 and we have 16 different examples that we referenced in
11:06:29 17 our brief of when they're discussing three ports, and
11:06:31 18 never in those 16 different examples do they say fewer
11:06:34 19 than three is possible.

11:06:35 20 THE COURT: Here's my problem with your -- your
11:06:40 21 all's argument is, you're sort of taking out of this that
11:06:46 22 the folks who are doing this would know where things go.
11:06:50 23 And what I mean by that is, you know, if friends gathered
11:06:58 24 to watch the Superbowl, two friends gathered to watch the
11:07:03 25 Superbowl on a big screen TV, which was in the middle of

11:07:07 1 the room, and they gathered around the TV. My guess is
11:07:12 2 they would both be sitting in front of the TV, next to
11:07:15 3 each other. You wouldn't say they weren't gathered around
11:07:17 4 the TV, which is the center point. And in the context of
11:07:24 5 what they're doing, which is what you have to -- one
11:07:28 6 skilled in the art would have to hear is taking the
11:07:30 7 context of what you're doing by using this patent.

11:07:36 8 So I'm having a hard time -- it seems to me that
11:07:39 9 you all are making more out of this than is there that
11:07:48 10 this is indefinite, given the technology that's involved
11:07:53 11 here. I'm not really following you guys on this point.

11:07:57 12 MR. TEPERA: I think what's important to -- with
11:07:59 13 that, your Honor, is gather around the TV, these are very
11:08:03 14 familiar things. This is the very point of novelty of
11:08:06 15 this invention. They're inventing based on the fact that
11:08:08 16 nobody has ever done this before, and that's why the
11:08:11 17 description has to be more explicit because we're not
11:08:13 18 bringing in the sort of inherent knowledge that one has
11:08:16 19 when you're putting chairs around the table. That analogy
11:08:19 20 sort of failed for that reason, bringing people before a
11:08:21 21 TV.

11:08:21 22 THE COURT: One skilled in the art wouldn't know
11:08:24 23 what arranged around a central axis is? I have to -- I
11:08:27 24 mean, when I read it, I had a pretty good idea of what it
11:08:31 25 meant. And I'm, as Brian Nash will assure you and

11:08:36 1 everyone at John Guaragna's table will assure you, I am
11:08:39 2 not one skilled in the art. And so, it's -- if I feel
11:08:45 3 like I could understand it, given the context of the
11:08:49 4 technology, I have a hard time finding that something's
11:08:52 5 indefinite.

11:08:55 6 MR. TEPERA: I think my response to that would be
11:08:57 7 at least there are other people of significant skills --

11:09:03 8 THE COURT: That not everyone's as dumb as I am?

11:09:05 9 MR. TEPERA: Pardon me?

11:09:06 10 THE COURT: Not everyone's as dumb as I am? No.
11:09:08 11 I just --

11:09:09 12 MR. TEPERA: I don't want the Court to think that
11:09:11 13 I was saying that.

11:09:13 14 THE COURT: I mean, Mr. Guaragna might have said
11:09:16 15 that, but not probably here. I think I've got your
11:09:23 16 argument.

11:09:23 17 MR. TEPERA: Just my final response to that, if I
11:09:26 18 can have one more minute of your time on this is, I think
11:09:30 19 at least within this courtroom, there would be
11:09:32 20 disagreement whether or not there is -- the second picture
11:09:35 21 shows ports arranged around, because it falls within
11:09:37 22 pretty clearly two of the constructions that the
11:09:39 23 plaintiffs have proposed today.

11:09:42 24 THE COURT: I understand your argument.

11:09:47 25 MR. TEPERA: The final explanation I have, before

1 I sit down on this topic, unless we're going to go through
2 all of them at once, is the -- in addition to trying to
3 point out that there -- it's possible that it's been
4 disclosed that there's two ports, plaintiffs also say, but
5 regardless, you can arrange two ports around a central
6 axis.

7 And what they've done is, they've drawn a figure
8 where they say if the port is sufficiently deformed, if
9 it's elongated into this horseshoe sort of shape, then I
10 could say that that is arranged around a central axis.
11 And I think that at some level, that's a concession that
12 regular circular ports can be arranged around a central
13 axis when they have to deform so much. But I think the
14 important part of this is, it's contrary to the
15 specification's teachings in all through column 7 and
16 column 8, where are these things arranged around? What
17 does it mean to be arranged? And throughout the
18 specification says, the center point is arranged here this
19 is arranged at this point, this port is arranged at that
20 point. They say this port is at zero degrees. This port
21 is at 90 degrees. It's not an array of degrees. It's not
22 a space. It's a single point.

23 And so, arranged around is not a discussion of
24 the size of the ports. It's their location of the ports,
25 and I think that up until this point, that has been

11:11:09 1 implicit in the briefings. Remember again, both sides
11:11:12 2 embrace this chairs are arranged around a table. That's
11:11:16 3 not a discussion of whether or not the chairs are big and
11:11:18 4 fat and curved, it's a discussion of point location.

11:11:22 5 But, again, going back to the claim language --
11:11:25 6 and I'm going to wrap up after this -- remember that is a
11:11:28 7 plurality of ports arranged around the central axis. And
11:11:32 8 that is not just a discussion of the relationship between
11:11:36 9 the ports and the central axis but among the ports
11:11:39 10 themselves. Just like the chairs are arranged around the
11:11:41 11 table based on their relationship with each other, the
11:11:45 12 same is true with these ports, and that's consistent
11:11:47 13 throughout the specification.

11:11:48 14 And they've totally eviscerated that requirement
11:11:51 15 there needs to be some association between the ports to
11:11:55 16 actually surround the central axis when they use a single
11:11:57 17 port to make a giant horseshoe to go all the way around
11:12:02 18 it. Thank you, your Honor.

11:12:03 19 THE COURT: Thank you. The Court is going to
11:12:05 20 maintain its primary construction that the claim term
11:12:10 21 "arranged around a central axis" is not indefinite and
11:12:14 22 that no construction is necessary.

11:12:16 23 Next --

11:12:17 24 MR. GUARAGNA: Thank you, your Honor.

11:12:18 25 THE COURT: Next claim term is "alignment."

11:12:20 1 MR. TEPERA: I suppose they don't need to
11:12:22 2 respond, so you want me to go right now; is that correct?

11:12:26 3 THE COURT: You know, it's a little bit like when
11:12:27 4 I'm doing sentencing and I tell people I'm going to give
11:12:31 5 them time served, it would never help for them to --

11:12:35 6 MR. GUARAGNA: Stand up.

11:12:36 7 THE COURT: -- stand up. So not that I'm saying
11:12:41 8 Mr. Guaragna deserves any time in jail. I'm just saying
11:12:45 9 you're always better off not getting up if you've won.

11:12:50 10 So on alignment.

11:12:52 11 MR. TEPERA: Thank you, your Honor.

11:12:52 12 Alignment is in claims 1 and 36. No construction
11:12:56 13 necessary is what plaintiffs have proposed, and the Court
11:12:59 14 has preliminarily agreed with that. It appears in the
11:13:03 15 last limitation of the independent claims where the ports
11:13:07 16 go in and out of alignment on the flowhead with those
11:13:11 17 ports that are in the flow restrictor, one or more of the
11:13:16 18 ports go in and out of alignment.

11:13:17 19 And the argument that we have here, I think, is
11:13:19 20 pretty simple is that we think there is an irreconcilable
11:13:23 21 tension in the intrinsic record on what it means to be
11:13:26 22 aligned. Dr. Noynaert points out that align can mean
11:13:30 23 different things in different contexts. With respect to
11:13:32 24 these tools, do you need -- is partial eclipse an
11:13:35 25 alignment? Or is it like a bolt and a nut where you need

1 a hundred percent alignment? And that's what we're trying
2 to figure out here.

3 Plaintiffs say, hey, the specification says
4 partial alignment equals alignment. I think that's sort
5 of an inartful way, though, to say a partial eclipse
6 satisfies in this situation. But what they -- what is
7 part of the intrinsic record and what a skilled artisan is
8 entitled to rely on when trying to understand the scope of
9 this patent is the prosecution history. And the one
10 argument that's in the prosecution history is respect to
11 this art called Eddison. It's a very similar device, all
12 claims are originally rejected over it, and it discloses
13 valves that go, quote, completely out of alignment, end
14 quote; and, in fact, it claims -- a claim related to that.
15 It says claims where fluid flow is interrupted -- where
16 the valve interrupts the flow of fluid.

17 And in response to the patent in suits
18 prosecution, the examiner even relies on that specific
19 line. It's 924 through 26 in the third excerpt down there
20 to point out that, hey, Eddison discloses a pattern of at
21 least one interval where fluid flow is substantially
22 blocked by the flow restrictor and points to this
23 completely out of alignment language.

24 And what this implies is a range of opening and
25 closing of about zero to 90 percent, according to Dr.

11:15:02 1 Noynaert, who looks at the maximum overlap and looks like
11:15:05 2 about 90 percent. Zero percent completely out of
11:15:08 3 alignment is the other end of that range. Applicant says
11:15:11 4 that this doesn't meet the limitation of moving in and out
11:15:13 5 of alignment.

11:15:15 6 Impulse explains that away by saying the opposite
11:15:19 7 is true. Whereas we think that that means that they're
11:15:21 8 saying zero to 90 doesn't meet going in and out of
11:15:24 9 alignment, they say no, that the difference is on the
11:15:26 10 other side of the spectrum. It doesn't go down to zero.
11:15:30 11 I think it's important to say, there is evidence in there
11:15:33 12 that it doesn't go down to zero. There is evidence in
11:15:35 13 there that it does go down to zero. It discloses multiple
11:15:39 14 things, Eddison does. It discloses valves that completely
11:15:41 15 pinch off and those that don't pinch off.

11:15:44 16 And so, to argue that yes, there is evidence that
11:15:48 17 -- and the evidence that Impulse points to that it doesn't
11:15:52 18 totally pinch off is not consistent with the total
11:15:55 19 disclosure of Eddison. So one thing that we know is,
11:15:57 20 Eddison goes at least -- discloses at least zero to 90 and
11:16:01 21 some subset of that, as well. And so, if going zero to 90
11:16:07 22 percent isn't moving in and out of alignment and the
11:16:10 23 patent says partial alignment is alignment, those two
11:16:13 24 things are irreconcilable. Dr. Noynaert includes these
11:16:17 25 different valve designs below and asks, you know, apply

11:16:20 1 this definition, your understanding of alignment, to those
11:16:22 2 valves. Do those move in and out of alignment? And
11:16:24 3 depending on which definition you apply, the answer will
11:16:27 4 be yes or no, whether it's partial alignment or not.

11:16:29 5 And we cite Teva on that one because we think
11:16:32 6 it's an important post-Nautilus case on this sort of
11:16:37 7 thing. It's molecular weight was the issue there. But in
11:16:41 8 the prosecution history, not just that that patent-in-suit
11:16:43 9 in Teva but that patent family, related patents to it,
11:16:48 10 different definitions of molecular weight were described
11:16:51 11 and they're wholly irreconcilable. And that's what Teva's
11:16:54 12 standing for is, if the claim term is not fixed to a
11:16:57 13 skilled artisan -- and this is one that's not -- there's
11:16:59 14 different reasons alignment can be important in different
11:17:02 15 contexts -- and the claim doesn't inform which one to
11:17:05 16 choose and the prosecution history shows irreconcilable
11:17:08 17 differences, then the claim is indefinite. It doesn't
11:17:12 18 inform with reasonable certainty.

11:17:16 19 THE COURT: Thank you.

11:17:19 20 Mr. Guaragna, are you handling this?

11:17:22 21 MR. GUARAGNA: Yes, sir.

11:17:22 22 THE COURT: If you would like to, I think the
11:17:24 23 only thing I really need for you to address is the
11:17:29 24 arguments counsel made with respect to Eddison.

11:17:32 25 MR. GUARAGNA: Yes, your Honor.

11:17:33 1 THE COURT: And Eddison, for the court reporter,
11:17:36 2 is, I think, unusually spelled, which is, E-D-D-I-S-O-N.
11:17:41 3 Not like Thomas Edison, but it has an extra D.

11:17:45 4 MR. GUARAGNA: Correct, your Honor.

11:17:47 5 I'm going to flip to slide 40. So, your Honor, I
11:18:04 6 think defendants have misstated the impact of Eddison and
11:18:08 7 I'll explain why. So we're looking at slide No. 40, if
11:18:11 8 you look at what the patentee actually said about Eddison,
11:18:13 9 you'll see that Rubicon left out a critical word when
11:18:16 10 quoting the office action response.

11:18:18 11 The applicant noted that the ports in Eddison
11:18:21 12 were always in alignment, meaning there was always some
11:18:24 13 overlap of the ports, and that's how they were
11:18:26 14 distinguishing it, which is entirely consistent with the
11:18:28 15 idea that those cannot move into and out of alignment. So
11:18:33 16 in that sense, it's entirely consistent with how the
11:18:36 17 patentee views the meaning of alignment in the 584 patent.
11:18:42 18 So that's the first points, your Honor.

11:18:43 19 Second point is, if we're looking at what the
11:18:48 20 patentee said, that's what the key critical issue is here.
11:18:51 21 It's not necessarily what, in fact, this might actually
11:18:53 22 teach or how the words are used in this particular
11:18:56 23 reference, but the patentee was distinguishing it based on
11:19:01 24 the fact that those ports always coincided, and that's the
11:19:04 25 key distinction.

11:19:06 1 The next slide, slide 41, actually shows that in
11:19:11 2 addition to being a distinguishing factor that the
11:19:14 3 applicant made, that their view of the Eddison reference
11:19:18 4 is actually correct. So if you look at the table
11:19:21 5 referenced on slide 41, to the left, and this is figure 5
11:19:25 6 in Eddison, you'll see that in the center column, the
11:19:30 7 angles go from zero all the way to 360, and at each -- the
11:19:34 8 beginning and the end point, there is still some
11:19:36 9 coincidence. There is still some amount of overlap within
11:19:39 10 those ports, which suggest that, in fact, the applicant's
11:19:44 11 reading of that reference was entirely consistent with the
11:19:47 12 584 patent.

11:19:48 13 THE COURT: Counsel, is there anything you'd like
11:19:50 14 to say in response to that with regard to Eddison?

11:19:53 15 MR. TEPERA: Your Honor, I'd just like to
11:19:57 16 highlight that that -- I think it is important that this
11:19:59 17 is not what the patentee pointed to, the evidence on
11:20:05 18 figure 5 and figure 6. And the chart that was
11:20:08 19 accompanying figure 5 is not what he pointed to when
11:20:11 20 actually trying to distinguish. It was just relying on
11:20:14 21 that one phrase about the assembly, that these things
11:20:16 22 always coincide. And what we're trying to do today is
11:20:19 23 infer what he means by coincide. A single word to mean
11:20:23 24 that something contrary to what the rest of the
11:20:25 25 specification spells out, which is that they do, in, fact,

11:20:28 1 move completely out of alignment. And I don't think that
11:20:30 2 that single word carries that clear of an explanation of
11:20:33 3 that's what the patentee intended here.

11:20:36 4 Thank you, your Honor.

11:20:37 5 THE COURT: The Court is going to maintain its
11:20:39 6 preliminary construction and find that the claim term
11:20:44 7 "alignment" is not indefinite, and it will have its plain
11:20:48 8 and ordinary meaning.

11:20:48 9 The final -- I think it's the final but tell me
11:20:51 10 if I'm wrong -- is the final "wherein the fluid flow is
11:20:59 11 substantially blocked by the flow restrictor." Is that
11:21:01 12 our last?

11:21:02 13 MR. TEPERA: Yes, your Honor.

11:21:03 14 THE COURT: Okay. Let me say that a little more
11:21:04 15 slowly for the court reporter. Wherein the fluid flow is
11:21:09 16 substantially blocked by the flow restrictor. Did that
11:21:14 17 come out right, restrictor?

11:21:18 18 MR. TEPERA: Your Honor, we have this presented
11:21:19 19 as an indefiniteness argument, and we tried to do a little
11:21:24 20 discussion with counsel beforehand. We are okay, I think,
11:21:27 21 with no construction necessary on this particular term so
11:21:31 22 long as similar to the polyrhythmic, this might be
11:21:34 23 something that's better brought up later.

11:21:36 24 But we want there to be the understanding that is
11:21:38 25 embraced by Impulse's own expert when he says what this

11:21:43 1 describes is complete blockage but for minimal leakage.
11:21:48 2 Because of the realty of implementation of this thing,
11:21:52 3 you're putting together a couple of valves. We understand
11:21:54 4 we don't work in this theoretical world. There might be a
11:21:57 5 little bit of leakage. But there is an attempt to have
11:21:58 6 complete blockage. This is that enhanced version of
11:22:02 7 polyrhythmic behavior that was showing throughout the
11:22:04 8 plurality of time intervals, amplitudes and
11:22:09 9 enhance-through complete blockage. And so long as
11:22:11 10 substantially means that, we're okay.

11:22:12 11 THE COURT: I think the Court's going to
11:22:14 12 understand what the word "substantially" means here.

11:22:17 13 MR. TEPERA: Okay.

11:22:18 14 THE COURT: And, again, it's one of those I don't
11:22:21 15 think it's indefinite. I don't think it's very difficult
11:22:23 16 for the Court to come up with a better word than
11:22:27 17 "substantially." We could come up with a different word,
11:22:29 18 but it would just mean substantially. But down the road,
11:22:34 19 if -- when you're defending the case, if you think the
11:22:38 20 plaintiff's expert's taking a position on infringement
11:22:41 21 that is not correctly utilizing the word "substantially"
11:22:47 22 for some reason or is applying it in way that you think is
11:22:51 23 inconsistent with what you think I would think is meant by
11:22:55 24 that, then file a motion, whatever motion is most
11:22:59 25 effective to bring that to our attention, and I think we

11:23:02 1 could take that up at that time.

11:23:03 2 MR. TEPERA: Thank you, your Honor. Can I
11:23:04 3 address one more point on that, at least to the --

11:23:05 4 THE COURT: Sure. You can address whatever you'd
11:23:09 5 like.

11:23:09 6 MR. TEPERA: There is a real impact of this, and
11:23:11 7 it's different from a lot of the cases in which
11:23:14 8 substantially is -- has been construed as perfectly fine
11:23:20 9 is because approximately works in a lot of those sorts of
11:23:24 10 cases. This is a case where tools vary based on very
11:23:27 11 small differences in their overlap, and there are exact
11:23:30 12 design points that people go for.

11:23:32 13 And, in fact, the patent-in-suit, we think, kind
11:23:35 14 of recognizes that itself where it has figure 14 where
11:23:39 15 they say, you know what, there's a lot of times where you
11:23:41 16 want to have some small, continued fluid flow, so we're
11:23:44 17 going to have that interior port. And there are times
11:23:48 18 where you want to maximize the pressure pulse. You want
11:23:51 19 to have zero fluid flow.

11:23:54 20 And so, that's why approximately doesn't really
11:23:57 21 get here and that's why we want to really understand that
11:23:59 22 you're talking about a 98 percent closed valve versus a
11:24:03 23 hundred percent closed valve really end up being two
11:24:06 24 different tools defined by two different design
11:24:09 25 specifications there.

11:24:10 1 THE COURT: I understand.

11:24:11 2 MR. TEPERA: Thank you. And with that, I'll sit
11:24:14 3 down. Thank you, your Honor.

11:24:15 4 THE COURT: That's it. Okay.

11:24:18 5 I should know this, but I don't. Has this case
11:24:21 6 been set for trial?

11:24:24 7 MR. GUARAGNA: Your Honor, actually, I was hoping
11:24:26 8 to address that, if we could.

11:24:28 9 THE COURT: If it hasn't been set, then yes, we
11:24:31 10 need to address it.

11:24:32 11 MR. GUARAGNA: I've got the Court's scheduling
11:24:36 12 order up on the Elmo, or I should here in a second.

11:24:39 13 THE COURT: And let me ask you all this. Is this
11:24:42 14 a Waco or an Austin case?

11:24:46 15 MR. NASH: This is a Waco case, I believe, your
11:24:50 16 Honor. We'd be happy to try it here in Austin if
11:24:55 17 everybody would prefer.

11:24:57 18 MR. GUARAGNA: We'll confer with our client on
11:24:59 19 that, your Honor.

11:24:59 20 THE COURT: Well, seriously. Confer with your
11:25:01 21 client and if your client is okay, I don't care. I mean,
11:25:05 22 we have a situation where both lawyers are from Austin.
11:25:09 23 And so, if you want to try it here. I understand -- I
11:25:13 24 continue to not -- I continue to believe that if I were in
11:25:16 25 either of your chairs, I don't know where it would be

11:25:19 1 better to try between Austin and Waco.

11:25:21 2 That being said, you're both from Austin. If you
11:25:24 3 want to try it here, we can try it here. If the plaintiff
11:25:28 4 -- you filed it in Waco. If you want to file it in Waco,
11:25:30 5 we'll try it in Waco. I wasn't intimating a feeling
11:25:34 6 either way. It's just that that's an option. If you all
11:25:37 7 want to do it here, I would certainly do it.

11:25:40 8 MR. GUARAGNA: We appreciate that, your Honor.
11:25:41 9 We will confer with our client and with counsel.

11:25:44 10 MR. NASH: Yes, your Honor.

11:25:45 11 MR. GUARAGNA: So the question I wanted to ask
11:25:47 12 your Honor because I cannot remember. We didn't confer
11:25:49 13 about this and it's really not a change in anything, but I
11:25:51 14 didn't know whether the dates that we had submitted were
11:25:54 15 actually confirmed to be clear on the Court's calendar.
11:25:57 16 So what I wanted to do, hopefully today, was to make sure
11:26:00 17 that these dates which we have inserted in our scheduling
11:26:03 18 order, we actually put dates in. But we also note that
11:26:06 19 the Court would set this at the Markman hearing.

11:26:09 20 So I wanted to just double check to make sure
11:26:11 21 that we were all in agreement as to whether the pretrial
11:26:13 22 conference would go forward on January the 28th with the
11:26:15 23 trial following on February the 1st and if that was what
11:26:19 24 the Court had down, as well.

11:26:21 25 THE COURT: I don't.

11:26:23 1 MR. NASH: I think we put this in based on the
11:26:25 2 model order. So.

11:26:26 3 THE COURT: I think there is a chance I may be
11:26:30 4 doing something not court-related in February that might
11:26:35 5 interfere with this, but I think Josh told me last night
11:26:39 6 that we are not in peril of not being able to get you a
11:26:43 7 trial in the either January or March time of next year.
11:26:49 8 So I would not, at the moment, count on going in February.

11:26:54 9 But you all let me know if January's too soon.
11:26:58 10 That's fine. If March is fine, let us know, and we'll get
11:27:03 11 it on the docket.

11:27:07 12 MR. NASH: Okay. We'll confer after this and get
11:27:09 13 back to your Honor with Josh.

11:27:10 14 THE COURT: Probably whatever works for you guys
11:27:12 15 in March would work for us, I think. So just y'all get a
11:27:15 16 date. It doesn't seem to me like this would take much
11:27:18 17 more than a week to try.

11:27:20 18 MR. GUARAGNA: I agree, your Honor.

11:27:21 19 THE COURT: Okay.

11:27:22 20 MR. NASH: Just one patent.

11:27:24 21 THE COURT: And as you guys -- I'm assuming no,
11:27:25 22 but I'll go ahead and put on the record, wherever you try
11:27:30 23 it, the magistrate judge will be picking the jury the
11:27:34 24 Thursday or Friday before. The upside to you all, as you
11:27:39 25 know, is that you get a lot -- you get a much better

11:27:42 1 judge, and you get 45 minutes or so per side, in addition
11:27:48 2 to what he does to pick the jury. And then, when we
11:27:52 3 started on the Monday morning of trial, we would start
11:27:54 4 with opening arguments. So you all would have already
11:27:57 5 picked the jury.

11:27:58 6 So whatever date you were saying -- so you have
11:28:02 7 jury selection/trial, actually, jury selection -- trial
11:28:06 8 would be on X date on a Monday. Jury selection will be a
11:28:10 9 click before that on Thursday or Friday.

11:28:14 10 MR. NASH: I understand, your Honor.

11:28:16 11 THE COURT: They've got great magistrates here in
11:28:18 12 Austin, too, so no matter where you do it, you'll have a
11:28:20 13 great voir dire.

11:28:21 14 MR. GUARAGNA: And I didn't get a chance to
11:28:23 15 correct the record, your Honor, but for the derogatory
11:28:25 16 comments that your Honor made about yourself, I don't
11:28:28 17 agree with them.

11:28:29 18 THE COURT: I thought it was Mr. Nash that made
11:28:31 19 them.

11:28:32 20 MR. NASH: Just let the record reflect I did not
11:28:34 21 make those comments, but I do appreciate the comments
11:28:36 22 about my beard.

11:28:36 23 THE COURT: Your beard's great. It's great.

11:28:41 24 MR. NASH: Thank you.

11:28:41 25 THE COURT: In fact, I just realized Mr. Guaragna

11:28:45 1 no longer has a beard; that's why you look so young today.

11:28:50 2 MR. GUARAGNA: You can take the man out of the
11:28:51 3 Navy, your Honor.

11:28:52 4 THE COURT: It hit me, you had changed and look
11:28:55 5 ten years younger and it's -- but Mr. Nash looks ten years
11:29:00 6 younger with a beard. That's what's amazing.

11:29:03 7 So gentlemen, again, this is the best job in the
11:29:07 8 world because it's just great lawyers doing a great job.
11:29:11 9 I appreciate your briefing and the arguments today. You
11:29:18 10 took up -- you gave us, literally, something to talk about
11:29:20 11 for three full hours driving up from Houston last night.
11:29:24 12 I appreciate that. Who would have thought cyclic or
11:29:27 13 cyclic would be so interesting.

11:29:29 14 MR. GUARAGNA: I think we can both agree, your
11:29:31 15 Honor, we appreciate the investment that you and your team
11:29:33 16 put into it.

11:29:33 17 THE COURT: Well, mostly the team. I have
11:29:36 18 three -- the three best clerks in the world. Not that
11:29:41 19 Judge Nowlin's clerk isn't great, too. Y'all have a great
11:29:45 20 weekend.

21 (End of proceedings.)

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UNITED STATES DISTRICT COURT)
WESTERN DISTRICT OF TEXAS)

I, LILY I. REZNIK, Certified Realtime Reporter,
Registered Merit Reporter, in my capacity as Official
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